Oversea Education

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This number of Oversea Education begins the new Volume XXIV, which means that Volume XXIII will only contain two numbers. For those who wish to bind their copies an index to Nos. 1 and 2 of Volume XXIII will, in due course, be issued. Subscriptions to Volume XXIII cover the two issues of Volume XXIII, and Nos. 1 and 2 of Volume XXIV. It is regretted that the Volume and Number on the title page of this issue are incorrect, these should read Volume XXIV, No. 1.

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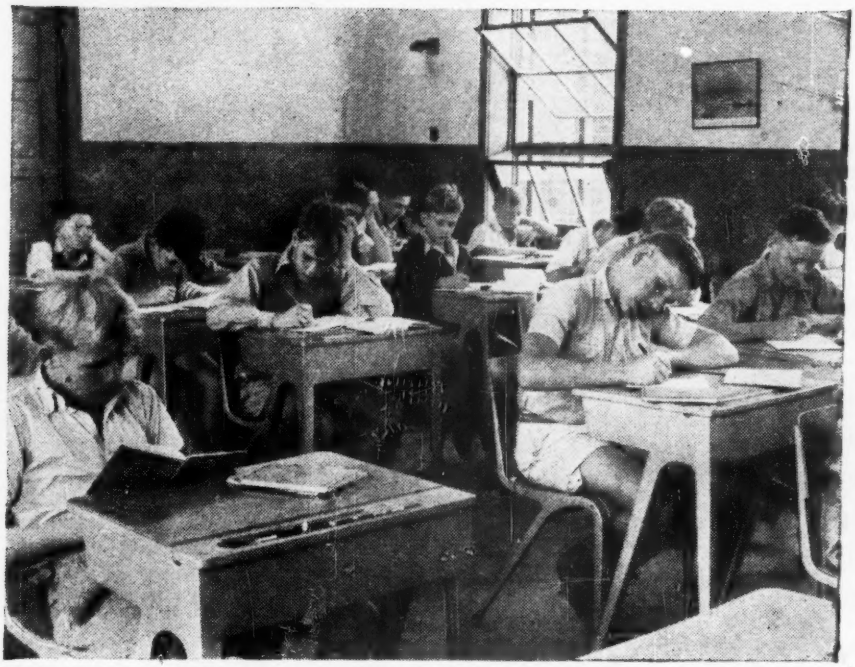

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OVERSEA EDUCATION

A Journal of Educational Experiment and Research in Tropical and Sub-Tropical Areas

Volume XXIII No. 3 April 1952

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Editorial

Silver Jubilee

The year 1952 marks the silver jubilee of the Colonial Department of the Institute of Education at London University. It was in 1927 that Dr. Percy Nunn, principal of what was then called the London Day Training College, became a member of the Advisory Committee on Native Education in Tropical Africa; and it was on 17th February 1927 that the Committee recommended to the Secretary of State that it was "very desirable that some post-graduate course should be adopted for educational candidates" for the Colonial Service. The first seven probationers were admitted to the new course in the following year. The year 1927 should therefore rank in the history of colonial education with 1921, the year of the first Phelps-Stokes report; for if 1921 provided a policy, 1927 provided the essential means of carrying it out. Ever since then, the Colonial Department of the Institute has played an indispensable part in the development of education in British oversea territories. It has provided practical training not only for new entrants to the profession but for experienced teachers desiring wider experience. In collaboration with its colleagues in the fields of anthropology and linguistics, it has carried out study and research on the fundamental problems involved, bringing together in this work educationists, English-born and colonial-born, Government and missionary, British and foreign.

Research and training are the traditional functions of a university. But in these days, a university is expected to look beyond its own walls. For many years past, the Department has been developing an information service of unique importance to workers in every branch of tropical and sub-tropical education. Its defunct bulletin, *The Colonial Review*, and the newly established mass education clearing house with its own bulletin, are only the parts of this extra-mural activity which are plain for all to see. The central problem of education in Colonies and other newly developing countries is how to use the educational system as a means of guiding and controlling the inevitable but dangerous process of culture contact. The peoples of Asia and Africa are determined to learn western culture. If they are left to learn what they can through commercial

and political contacts, they will get much that is bad and miss much that is good. Governments and educationists need the guidance which only a university department can give. Close enough to practical affairs to see and to know, far enough away to think and understand, the Colonial Department we hope will long continue the service to oversea education which its first quarter-century has so auspiciously begun. The time has surely come for the Department's widening interests to be recognised by a change of name. Colonies must decrease, but the activity of the Colonial Department must increase; there is no philosophical basis for the idea of a department of colonial education; and the department's present name is beginning to look like a quaint historical survival which ought not to survive.

Sir Fred Clarke

The Colonial Department's silver jubilee was saddened by the death of Sir Fred Clarke, director of the Institute and professor of education at the University of London from 1936 to 1945. Fred Clarke was born in 1880, and went straight from Oxford to become method master in a training college at York. In 1906 he became professor of education at Southampton, and after five years went to South Africa as professor of education in the university of Cape Town. In South Africa he spent eighteen years, and in 1929 he crossed the sea again to take the professorship of education at McGill. Returning to London in 1934 with Canada and South Africa behind him, it was natural that he should take the post of adviser to the university's oversea students. Two years later, however, on Sir Percy Nunn's retirement, Clarke succeeded him as professor and as director of the Institute. He was knighted in 1943, two years before retiring from his professorship. For him, retirement meant simply a change of occupation; he resumed his old post as adviser to oversea students, became educational adviser to the National Union of Teachers, and was incessantly active in committee and in writing. He was president of the educational division of the British Association in 1949. Few can have exercised a deeper and more fruitful influence on educational policy; none can have more happily combined the quiet authority of a teacher with an eagerness to learn from others.

About Ourselves

As we promised in our last issue, *Oversea Education* now appears in its new dress. Taking a surreptitious look at ourselves in the mirror, we must admit that we feel as bashful as a lady going straight from a crinoline to a ballet skirt. But we hope you agree that we look quite nice in it. We are told that if we wish to be fashionable, we must begin every article on a new page. This means that unless we are to waste paper, we must end every article fairly near the bottom of a page; and this will involve a certain stretching and trimming. We shall get better at this with practice. Meanwhile, it will be a help if contributors will kindly bear this in mind, and try to make their articles of the right length! There are 620 words to a full page, or 520 with a headline. Now on the question of contents. One or two friends have suggested that we should have more articles, like those in *The Teacher's World* or in colonial *Education Journals*, on subjects of interest to primary or secondary school teachers, such as discussions on teaching method and on school organisation. Like Jeeves, we endeavour to give satisfaction. May we know what our readers think about this? And will readers who like the idea send us contributions of this kind? And will all our readers help us by roping in new readers, by sending us something to print, or by suggesting how we can make *Oversea Education* a better paper?

Methodist Training College Komenda, Gold Coast

By L. A. CREEDY, *Principal*

DURING the past four years a number of new Teacher Training Colleges have been opened in the Gold Coast, and since these colleges have been of a new kind it may be helpful to give some account of this development and of one of these colleges in particular.

Shortly before the War, Government appointed an Education Committee with representatives from Government, the Educational Units run by various Churches, and the community generally to plan for the development of Gold Coast Education. The Committee considered the need for a great expansion in education and discussed ways and means of opening many more schools at a cost that the country could afford. At that time (and the same is true to-day) most of the trained teachers had received a four years' training after a primary school (Standard 7) education, a much smaller number held the roughly similar qualification of two years' training after the Cambridge School Certificate, and very many teachers were untrained. The Committee concluded that there must be a great speed-up in the training of teachers and that salaries must be such that the community could afford to pay a greatly expanded body of teachers. So the idea of the two-year trained teacher was evolved. The existing colleges were to continue their excellent work of training men and women who could teach in all sections of the primary school; but a number of new two-year teacher training colleges were to be established to train teachers for rural infant-junior schools. Such rural infant-junior schools must be, the Committee saw, the focal point of development, if education was to be brought to every Gold Coast girl and boy.

The recommendations of this Committee (the 1937-41 Committee, as it became known) were in general accepted by Government and the country, although there were naturally some fears that a shorter course of training might lower the general standard of education. It was not possible immediately to implement the report, but in recent years not only have the existing four-year colleges been expanded but also eleven new two-year teacher training colleges have been opened.

Ten out of eleven of these colleges are for male teachers, for so far as women are concerned efforts have been largely directed to increasing the numbers taking the four-year course. The colleges are run either by Government or by various churches. They vary in size, but in general they are designed either for 60 or 120 students.

The Methodist Training College, Komenda, of which a more detailed account may now be given, was opened at the beginning of 1948. It is situated on the coast between Cape Coast and Sekondi and a mile outside the little fishing town of Komenda, and occupies, by lease from the Komenda Native Authority, buildings which were erected during the war as a Fleet Air Arm Station. The situation is a delightful one, the college buildings stretching along a low ridge overlooking the sea, whilst immediately inland there is ample level land for farming, games, etc.

The buildings were fortunately well suited for adaptation as a college, and were renovated with the help of grants

from Government. One main building contains four classrooms, assembly hall cum chapel, dining hall and kitchens, staff room, office and stores. The students (120 in number) live in four houses, each of which consists of nine rooms with a large bathroom and latrine. The principal and all masters have houses on the college site. There is also a temporary crafts shed and woodwork shop, but better accommodation is envisaged for the teaching of these subjects, together with a number of other improvements. The Methodist Training College has, however, been more fortunate than a number of other two-year colleges, which have been started in less spacious temporary premises.

The environment at Komenda is suitable for the training of rural teachers, for the main local industries are fishing (in Komenda itself) and farming (in a group of neighbouring villages). The college has itself to face a number of the problems facing a normal village, such as the provision of a water supply (which is furnished by large rainwater storage tanks), sanitation (an improved pit latrine is used) and lighting (pressure lamps meet this need at present).

The college provides training mainly for Methodist teachers, but a certain number of candidates are also prepared for the service of the Komenda and other Native Authorities. Students are recruited from the Colony and Ashanti by means of an entrance examination in vernacular, English, arithmetic and scripture, together with reports on the teacher's practical ability and character furnished by the visiting teacher under whom he has been working. It has been found advisable to prescribe that students must be at least 20 years of age and must have taught for at least two years (*i.e.*, as a pupil or uncertificated teacher); and we have come to the conclusion that it is only possible to give an adequate training in two years if a man has some experience in teaching and a certain maturity of outlook. As a result a varied body of students has been attracted; some are married, some single, some have taught for as much as ten years, others have done various jobs before becoming teachers, and at present there are a number of ex-servicemen in training who are doing very well on the whole. But practically all the students have one thing in common—a real interest in teaching and a determination to get the best out of the course; and this has been a source of great help and encouragement to the staff.

Forty students were admitted when the college was opened, and these were divided into two classes, each with a distinctive vernacular name—Asatwafo ("Pioneers") and Fapemtowfo ("Foundation Layers"). Subsequently the admission has been 60 per annum, so the college now consists of 120 students, divided into two first-year and two second-year classes.

The staff numbers eleven, the Principal (a European at present) and ten African masters. One of these is an agriculture specialist, another an art and crafts specialist, and a third a carpenter. Most of the staff were originally trained at Wesley College, Kumasi (a Methodist four-year training college) and then made their mark as good practical teachers and headmasters, especially in infant and junior schools. Prior to the opening at Komenda, they, together with a number of Presbyterian colleagues, were given a year's special training at the Presbyterian Training College, Akropong, to prepare them to give the new kind of course envisaged for the new two-year college. Subsequent to this they served for two years as visiting teachers in charge of groups of rural infant-junior schools, working in just the kind of schools and with just the kind of teachers that the Methodist Training College is designed to serve.

It is believed that such success as has so far attended our work has been largely due to this careful selection and preparation of the staff, which has enabled them to make the training given

by the college a really practical one. Official visitors have been good enough to speak in appreciative terms of the "enthusiasm and sense of purpose which characterise the staff".

The central problem before the new two-year colleges is how to prepare teachers adequately for the work of the rural infant-junior school within the limited period of two years. Certain prerequisites in the selection of students and staff have already been indicated; and it should be noted also that we have been helped by the assignment to the two-year college of a precise, limited aim. We know that our students are going to rural schools; and our efforts can be concentrated on training them to teach children of a particular age-range. It is important also that the starting of these new colleges has given Gold Coast educationalists a fresh opportunity of attempting to devise a course of training specially adapted to the needs of the Gold Coast.

It may be of interest to quote the aims of the Methodist Training College to indicate the lines along which one training college has been tackling the problems.

"*Aims*

1. To consolidate the students' present knowledge, extending it at certain points only.

2. To try, as far as may be, to produce 'live' people, with zest and ability to go on learning.

3. To train teachers keen and able to tackle rural infant-junior school work, with a vision of what these schools may do to uplift the community: and to this end to give them the requisite professional skill.

4. Above all, to develop that Christian character that can alone provide the basis and dynamic for such work.

Certain corollaries arise from the above

(*a*) The tendency to cram and to overload the course must be avoided.

(*b*) To help them to go on learning, students should be trained to use books with intelligence and interest.

(*c*) Intelligent observation must be encouraged: education starts, so to speak, with an understanding of the environment, in order that it may then extend beyond the environment.

(*d*) A real interest in and love for children must be fostered."

But a more detailed account of some aspects of the college's work is necessary in order to clothe these bare bones with flesh.

The curriculum includes the following subjects: agriculture and rural science, apparatus making, arithmetic, art and crafts, carpentry and building, domestic instruction, education, English, music, P.T. and games, religion, vernacular, world knowledge (history, geography and citizenship), community study and service, and writing.

It follows from what has been said above that the course has to be a professional one right from the beginning, and each master is responsible both for matter and method in his subjects (*e.g.*, the master teaching English consolidates the students' knowledge of the subject and shows them how to teach it in school).

In the work in education stress is laid on child study as the basis of all the students' work in the study of teaching methods and organisation. To this end a child study questionnaire is sent to accepted candidates, so that they may start observing before coming to college, and the first school practice consists largely of such observation. This emphasis on child study has had encouraging results in developing in the students the right approach to their teaching.

Practical activities of various kinds play a large part in the course, and stress is laid on agriculture, with the aim of teaching such improved methods as may be taught to children in school and to adults in the village. An attempt is made to apply principles of good husbandry in the use of the college

grounds. A four-and-a-half-acre food farm is maintained largely by the students: an orchard of citrus fruits, mangoes, guavas, etc., has been planted, and a plantation of coconut palms; a firewood reserve has been started and is being extended yearly: and the college now possesses a football and athletics field, prepared mainly by the students. The area around the college buildings containing ornamental shrubs and flower beds and grass slopes is cared for by the four student houses, and great enthusiasm is shown in the weekly "general cleaning" of the buildings and grounds, when the houses compete for a trophy carved by the art and craft master.

Practical activities also include the teaching of art and crafts by a master trained in the art and crafts course at Achimota under the late Mr. Meyerowitz, and crafts such as basketry, weaving, woodcarving, etc., are taught. The dining hall and students' houses are now decorated by mural paintings and friezes done by the students. Carpentry and building are also taught, the aim being to give the students the interest and knowledge necessary for them intelligently to supervise the erection of school buildings and the making of furniture, as well as to carry out simple repairs in home and school. The making of teaching apparatus (principally number and reading material) is also an integral part of the course, for many of the schools to which the students go are poorly equipped, and each student leaves college with a box which he has made containing his own apparatus. There is also a "make do and mend" class run by the Principal's wife in which the men learn to do simple repairs and even to produce gaily embroidered pillow cases!

A principal need of Gold Coast education is to link school and community and to try through the school really to improve the life of the people (the way in which, for example, school hygiene has little effect on the village is only too familiar). The Methodist Training College tries to meet this need both by the whole emphasis of its training and also by means of community study and service and its Sunday work.

In community study and service each class goes down to Komenda town one afternoon a week, the first part of the time being spent on a social survey and the second in service of various kinds suggested by this survey. The aim of this work is to interest the students in the life of the local community and to show them how to study it, so that in the schools they may be able to relate their teaching to the local background, and it also gives them some idea of how to set to work to improve a community.

The social survey has taken more than two years to complete, and students have been impressed by the complexity of the community life. Service rendered to the town has included the digging of drains and the running of an adult literacy campaign; though it must also be said that adequate communal self-help has still to be stimulated.

On Sundays the college is linked not only with Komenda but also with thirteen other neighbouring villages. Groups of students go each week to these villages and first help to conduct morning worship in the little Methodist chapels. After service one of the students of the Red Cross group brings out his dispensary box and treats the simple ailments of the villagers; and in the afternoon both children and adults come along to Sunday School to learn to read. Three larger itinerant groups also help in the work. One, the Preaching Band, conducts open-air services in the villages in turn. A second, the Red Cross team, backs up the efforts of the "resident" dispenser, and holds a Health Day in each village. The third, a newer and quite encouraging experiment, consists of a dramatic group, which takes freely dramatised Bible stories round to the villages. Daniel and the Lion—especially the lion—was a great success!

The college also takes various opportunities of inviting the local folk up to

the college. When, for example, we held our formal opening or dedication at the end of our first year, we were encouraged by the presence of all the chiefs of the Komenda State and a crowd of some 600 from Komenda and neighbouring villages. We had a gratifying sense then that we were becoming part of the community.

School practice occupies two or three weeks each term, and as far as possible all students are on practice at the same time and all the staff are engaged in the supervision. Three different sets of schools are used :—

(1) Schools in Komenda and four nearby villages, all of them Native Authority schools and all (except Komenda) rather backward village schools.

(2) Some larger, well-staffed schools up to a 30 miles radius from Komenda.

(3) Well developed rural schools, and also more backward ones, in the students' own language areas.

By working in these various groups of schools, students get both the opportunity to see what a good school should be like and also the chance to try to improve a more backward school. As far as possible students on school practice live in the villages where they are teaching. The need is also felt for the college to have its own practising school.

In his last school practice the student is judged not only by particular lessons he takes, but also by his work in improving the apparatus of the school and its grounds, and by his ability to sum up the needs of the village and to set the school to work to meet these needs. The most encouraging instance so far has been that of two students who stimulated the community to finish their new school building, got the grounds cleared and laid out, equipped the school with apparatus they made, and got the whole school into working order—all within three weeks.

The ideals of the Methodist Training College are summed up in its badge and motto Bepɔw-so Kurow Hyerɛm, "A City Set on a Hill Shines Forth", in which an attempt is made to epitomise the vocation of the college and of its students when they go out to their villages. Since its first students only left at the end of 1949, it is too soon to try to judge of the success or otherwise of the College's work; but official comment has been encouraging so far, and of our two-year teachers, inspectors have reported that in many cases they are keen and are proving good practical men.

No account of the Methodist Training College would be complete that did not pay tribute to the happy threefold co-operation that has made its establishment possible. The buildings have been provided by the Komenda Native Authority: the Central Government finances the College: and the Methodist Church staffs and administers it. It is our hope that this threefold partnership—upon which the future of Gold Coast education depends to a large extent—will long continue.

The Teaching of English as a Preliminary to the Teaching of Other Subjects

AN EXPERIMENT
AT THE GOVERNMENT AFRICAN SCHOOL, KISII, KENYA

By VIDLER HATFIELD, *Education Officer, Kenya*

THE Government African School, Kisii, is a boarding school for boys and lies south-east of Lake Victoria in Central Africa. It is some eighty miles from the nearest railway station and is in the heart of one of the more educationally backward native districts of Kenya.

When I went there to take charge in 1944 the school offered an academic course covering the sixth, seventh and eighth years of formal education. Entry to the school depended upon success in a competitive entrance examination. The average age of entrants should have been 12 but was in fact about 15.

Most of the boys were either Luo or Kisii, their languages being totally different. Their primary school education had been conducted in their own languages in the first few years, thereafter largely in the lingua franca of the country, namely, Swahili, a foreign language to all of them.

I found that the medium of instruction at the Government school was Swahili in the first year, during which the boys were taught English for some six periods per week. During the second year English became the medium of instruction and at the end of the third year the appropriate national examination was written in English. The masters were all Africans.

An approximation to this arrangement was general in schools using English for the final examination in preference to Swahili.

The brighter African boys are remarkably good linguists, nevertheless it did not surprise me at all to find boys in the second year and even in the third year busily taking down from the blackboard history, geography and hygiene notes which they did not understand because the simple English used was beyond them. They admitted that a fair amount of the verbal instruction was beyond them as well.

The best way to tackle this problem, I considered, would be to break away from the conventional arrangement of teaching all the subjects concurrently and devise a new arrangement by which a thorough grounding in English would be given before the teaching of other subjects was attempted: then, not only would the instruction in those subjects be better understood, but the instruction would itself be a form of exercise in English.

There were, however, practical difficulties in the way of teaching nothing but English for two or three terms, the critical one being that though all the masters could teach their subjects in English, some of them could not teach English as a language.

The idea was discussed in principle at a staff meeting and voted worth a trial to whatever extent was practicable. (In my experience Africans can be relied upon to support any scheme likely to improve the standard of English.)

Accordingly the school timetable was rearranged so as to eliminate geography,

history, nature study and hygiene entirely from the first year and to give these subjects the necessary extra time in the second and third years. At the same time a very intensive first year course in English was laid down. Furthermore the masters teaching agriculture, mathematics, physical training, carpentry and tailoring were instructed to open the year by teaching the new boys the English names of the things with which their subjects were particularly concerned, and to change from Swahili to English as a medium of instruction by a sort of sliding process as quickly as the changing situation would allow.

The weekly allocation of time was as follows. Periods lasted 40 minutes, except physical training, 30 minutes. A few lessons were given on Saturday mornings.

Subject	*First Year*	*Second Year*	*Third Year*
English	16	5	5
Mathematics ...	6	7	7
Nature Study and Hygiene ...	—	4	5
History	—	3	3
Geography ...	—	3	3
Swahili	4	4	4
Agriculture ...	4	4	4
Physical Training	5	5	5
Woodwork and Tailoring ...	6	6	6

The scheme was explained to the boys and a rule laid down that they were to speak nothing but English from Monday to Friday each week on penalty of doing the daily dining-room chores, new boys being allowed six weeks' grace. African boys in Kenya secondary schools are usually keen to get on, and the boys accepted the rule as being entirely in their own interests. To make the rule work, a number of metal discs were given to the prefects to hand to anyone they heard speaking any language but English. The recipient could, in his turn, pass the disc on to anyone else he heard breaking the rule. Whoever had a disc in his possession at a meal-time had to help clean up the dining-room afterwards.

The experiment was launched in January, 1945. It worked satisfactorily from the start. There were, inevitably, some growing pains. In the first place I made the mistake of permitting two different systems of English teaching to be used instead of sticking to one, and this caused some confusion. In the second place the teachers were accustomed to following ready-made schemes of work which they had brought from the teacher training schools, and they found it very difficult to make the (to a European) very simple rearrangements necessitated by the new allocation of time. Thirdly the rule about speaking English from Monday to Friday had to be carefully nursed in order to get it established.

By the end of the first term the masters teaching other subjects than English to first year students reported that they were no longer finding it necessary to use much Swahili. A few months later English had become the medium of instruction in all subjects.

At the end of 1947 the first batch of boys who had been exposed to the new policy sat for their final examination. I had left the school some time before this for another appointment, but my successor kindly kept me in touch with developments. The boys did extremely well, achieving the best result in the history of the school with a record number both of passes (50) and qualifications for further education (18).

During 1948 there were changes in the staff involving a lowering of its academic standard and replacement of experienced teachers by men fresh from training school. Nevertheless there was a further improvement in the results at the end of the year, once again both in the number of passes and of qualifications for further education.

It is too early to be sure that these successes are the fruit of the new policy of concentrating on English in the first year, but they certainly justify the continuation of the experiment.

Science Teaching in the Tropical Dependencies

By L. J. LEWIS

Institute of Education, University College of the Gold Coast

"*Efforts have been made during the last fifteen years to give the teaching of science a more assured place in Nigerian Secondary Schools. For reasons of which the Department of Education is fully cognisant, these efforts have met with only a limited degree of success. Indeed, there is a widespread feeling of dissatisfaction and misgiving with regard to science teaching generally. A recent survey showed that in the thirty-one Secondary Schools with at least* 250 *classes there were approximately eighty-four secondary 'Science teachers' of whom only thirteen could be considered as qualified. . . . This . . . suggests that science teaching was introduced in the last decade with excessive haste and without careful planning and adequate provision for teacher training. There can be little doubt that in some schools it would be better to suspend the subject until suitable staff becomes available; badly taught, it does more harm than good.*" (*Memorandum on Educational Policy in Nigeria S.P. No.* 20/1947.)

WITH little amendment this statement might be used to describe the present condition of science teaching throughout the colonial empire.

It is in fact true, "that science teaching was introduced in the last decade with excessive haste and without careful planning and adequate provision for teacher training." The reasons for its introduction were many, among the more important being the following. In some instances the subject was introduced as a result of the enthusiasm of an individual without serious thought being given to the prospect of continuity of qualified staff or for the adequate build-up and replacement of equipment and materials. The needs of the technical departments for apprentices and junior assistants possessing some factual knowledge of a more or less scientific character frequently served to provide an impetus to the introduction of science into the curriculum. A more general stimulus was provided by the memorandum, *Biology and its Place in Native Education in East Africa* (African East No. 1134), Prof. Julian Huxley. In the case of the voluntary agencies, realisation that their pupils would be debarred from certain avenues of employment and in some cases also debarred from the only higher educational institution in the territory unless they studied science, led to the introduction of the subject without the provision of adequate facilities and staff. In addition to these more or less practical reasons for introducing science into the curriculum there was the general influence of a vague idea that it is good that the pupils should know something about science. This is an idea frequently held by people completely ignorant of the nature of science or by others whose ideas were based upon an uncritical assumption of its character, traceable particularly to the claims for science which Karl Pearson expounded in his *Grammar of Science*, as providing an "education specially fitted to promote citizenship". This claim was based upon a belief in the applicability of scientific

method of which Pearson said : " The reader may perhaps feel that I am laying stress upon *method* at the expense of material content. Now this is the peculiarity of scientific method, that when once it has become a habit of mind, that mind converts *all* facts whatsoever into science. The field of science is unlimited; its material is endless, every group of natural phenomena, every phase of social life, every stage of past or present development is material for science. *The unity of all science consists alone in its method, not in its material.*" The failure of many scientists to exhibit the exactness and impartiality of analysis to affairs outside the laboratory suggests that the validity of the hypothesis is open to question. In fact, only too frequently, violent polemics rather than reasoned opinion have characterised scientific controversy, and furthermore, the capacity for impartial and exact analysis has frequently been demonstrated by men before the techniques of scientific investigation had been thoroughly established.

The questionableness of many of the reasons which first motivated the introduction of science into the curriculum in the tropical dependencies suggests it might be advisable to re-examine the place of science in education in tropical areas. And first, it might be as well to clarify ideas to the nature of science. Some consideration of the character of science which has been given expression in *General Education in a Free Society* (Report of the Haward Committee, 1945) offers a guide to the understanding of the nature of science likely to prove more fruitful than most definitions for our purpose.

"Science means many things to many different persons. To some it is typified primarily by the miracles of technology which have changed the face of civilisation and which exert a continuing impact on all aspects of modern society. To others science signifies predominantly an intellectual enterprise marked principally by precision, so that it tends to fuse with mathematics; or by the ordering of evidence, so that tends to fuse in this regard with certain social sciences. To still others it presents primarily a body of knowledge and hypothesis concerning the material world.

"Science partakes of all these things. But if it is to be considered fruitfully, and its contribution to general education evaluated, it must be defined more adequately. From our point of view science is primarily a distinct type of intellectual enterprise, involving highly restricted aspects of reality and prepared as such to make particular types of contribution to general education.

"Science is not to be divorced from technology. Science and technology develop in parallel, each fructifying the other. Yet science is not technology. Its prime end is *knowing* rather than *doing*; or better still, it is doing in order that one may know." It is that accumulative knowledge in which new concepts evolve from experiments or observations and are fruitful of new experiments and new techniques which influence further experimentation.

It is this dynamic character of science which makes it so important to man in the modern world and makes a particular claim for its place in the curriculum in the schools in the tropical dependencies. The lack of scientific knowledge is in a large measure responsible for the low standards of life of the indigenous communities. The satisfactory development of local resources cannot take place without scientific knowledge of the nature of the resources and the possibilities of their exploitation. The eradication of many of the causes of ill-health so prevalent in tropical areas will be brought about only when the masses of the people possess enough understanding of the facts upon which preventive health work is based, to ensure their active co-operation in the application of the knowledge to the controlling of the local environment. Apart from the material utilitarian value of science to the peoples of the tropical dependencies, there is the political

significance of the people's possessing some understanding of science. It is the avowed intention of the British Government to exercise control over the tropical dependencies in such a manner as to make it possible in the shortest period of time to set up the various territories as independent democratic states. An eminent American scientist and educationist commented recently on the nature of democracy and the relevance of science to daily life, "In a democracy, political power is widely diffused. National policy is determined by the inter-action of forces generated and guided by hundreds of thousands, if not millions, of local leaders and men of influence. Eventually within the limits imposed by public opinion decisions of far-reaching importance are made by a relatively few. These men are almost accidentally thrown into positions of temporary power by the forces working through our benignly chaotic system of political democracy. Because of the fact that the applications of science play so important a part in our daily lives, matters of public policy are profoundly influenced by highly technical scientific considerations. Some understanding of science by those in positions of authority and responsibility as well as by those who shape opinion is therefore of importance for the national welfare." (J. B. Conant, President, Harvard University, *On Understanding Science*, O.U.P., 1947.) This comment on science and democracy made about democracy and science in reference to the United States is equally relevant to the new democracies in the process of growth in the British tropical dependencies.

In brief, science should be given a place in the curriculum because it offers knowledge vital to the overcoming of factors in the environment which prevent the maximum development of local resources for the benefit of the people, and because without a general diffusion of the knowledge of science democratic government is likely to throw the onus of authority and responsibility upon men incapable of understanding the profound influence of applied science in the daily life of the community. The simplest and more immediate claims for a place in the curriculum on behalf of science are the utilitarian needs of understanding on the part of the community of the particular pieces of scientific knowledge, the application of which to the local environment provide immediate improvement in the health of the community, and immediate improvement in material advantages from the primary modes of gaining a livelihood in the particular local environment. These short-term possibilities are dependent upon there being available a sufficient number of technologists possessing a knowledge and understanding of science and able to apply that knowledge to the technical needs of the community.

As a result of the Nigerian survey which has already been referred to certain recommendations were made. Four of them call for comment in the light of the definition of science and the reasons for giving it a place in the curriculum enunciated above.

"(1) A wide general knowledge of natural phenomena, the laws governing them and their reactions on human society, is essential in the modern world. The teaching of this is therefore important in any educational system.

"(2) A start in the acquisition of such knowledge should be made as early as possible. . . .

"(3) At the secondary stage all boys and girls should continue their studies of *General* science. The term ' general science ' means a careful introduction to the study of Nature in the widest sense of the word, that is to Biology, Chemistry, Physics and other branches of science. The work must depend largely on everyday objects and phenomena, both living and non-living, with much experimental work. The basic

principles studied must, wherever possible, be referred to the pupils' environment.

"(4) Students wishing to embark on a career needing greater academic or technical knowledge should be provided with facilities at the post-secondary stage. Their requirements should not influence the secondary school curriculum."

Memorandum on Educational Policy in Nigeria (S.P. No. 20/1947).

It is quite clear, that whatever interpretation be placed upon the first statement, it is intended that the treatment of science is intended to lead to general understanding and not to special education of a technical character. It is in fact stated categorically in the fourth recommendation that the post-secondary stage should be regarded as the proper starting point of specialist instruction. The weakness in the statement is contained in the third recommendation with its omnibus label "general science" and its definition in terms of individual sciences.

The idea of "general science" on the surface appears to be very satisfactory; in practice it too frequently leads to sandwiches of physics, chemistry, biology, and sometimes hors d'oeuvre of astronomy, meteorology and geology. The integration of the parts may possibly exist in the syllabus or lesson notes but rarely makes anything more than a fleeting appearance in practice. What is overlooked in "general science" is that despite many inter-connections and similarities the individual sciences differ widely, considering different things or considering the same thing from different levels of approach and reference. In fact the division of the natural sciences is not a conservative educational practice, it is inherent in the nature of the material and the modes of reference employed in the particular sciences. There is no more genuine integrative element in "general science" than there is in Pearson's *method* of science. In fact the integrative element lies not in any theoretical concept arising out of science, it is inherent in the nature of science as a human activity. Initially it is to be found in the direct contact which every day affords with the world of immediate environment of the pupil, involving primarily an emphasis upon fact and classification. As soon as the experience and facts involved lie outside the practical features of the daily life of the pupil a broader perspective and a wider context become necessary if the science teaching is to become meaningful and of lasting value. This is not to be sought through any approach through the supposed "steps" of scientific method, to be learnt and followed in sequence in reference to the various bits and pieces of phenomena. This is a process which is contrary to the practice of the working chemist when applying himself to any particular problem. Nor indeed, is it to be sought by analysis and classification of procedure with reference to a particular problem. This is a process demanding some maturity of powers of observation and analytical thinking.

Most satisfactorily an approach can be made through a unit of experience, and the examining of the inter-relations without reference to the limitations of the various aspects of science which might be involved. For example, the direct experience of air pressure demonstrated by a tornado (or its characteristic equivalent) offers a starting point for observations and experiments on the nature of the atmosphere which involve the spheres of physics, chemistry and biology, yet relate the pupil's activities directly and continuously to the processes of direct observation of natural phenomena which are basic to all science. Using such a method of approach and introducing the simpler techniques of collection, classification and description, the foundations can be laid of that background of information which is indispensable if a mature outlook is to be developed. Properly treated, the study of units of experience

in this manner gradually moving beyond the pupil's immediate environment and involving the examination of different aspects of the same phenomena should provide material which lends itself to demonstrating the different disciplines which the division of the sciences exhibits. Such an approach should also bring out the social implications of science, in so far as problems of nutrition, land conservation, health and exploitation of local resources can be approached through a variety of procedures without involving emotional prejudices.

In the later stages some place may be found for a certain degree of historical study of science, by examination and repetition of some of the key experiments which gave rise to significant new concepts, and by observations of the technical developments which are derived from application of the new knowledge in industrial fields and of the consequent social changes in human relations. This historical element is not to be confused with the introduction of biographical material into the conventional science course. The value of such material and its special treatment will depend upon the level of general education attained by the pupils as well as upon the manner in which the science is treated. Unless the general education has reached a satisfactory level and been pursued in an integrated manner it is probable that the history material is better omitted.

The organisation of the science teaching along the lines suggested will not fit easily to a syllabus or a standardised scheme of work and may not accord satisfactorily to school certificate or similar requirements. But when the general weakness of established schemes of work is admitted, and the element of "scholasticism" which written examinations encourage is recognised, this apparent shortcoming should cause no fear. A more serious objection might be put forward by those anxious for the technical efficiency of the scientists-to-be. If they are condemned to the unit approach, there is danger that there will be serious gaps in their skills as potential physicists, chemists, biologists, and certain to be gaps in their systematic knowledge of their special subjects. Such criticism is almost certain to be valid, but the primary aim of teaching science in the secondary school is to provide all pupils with some understanding of the nature of science and its place in the activities of human society. So long as the great majority of pupils have to complete their formal general education and particularly their systematic acquaintance with the content and methods of science by the time they leave the secondary school, the main effort of the science teacher must be the providing for all, in so far as in him lies, the means of understanding of science. It is, in fact, unfortunate that the manner in which science studies have developed in Europe and America has led to a degree of initial specialisation that has resulted in a compartmentalising of activity, which sometimes makes it difficult for the science specialists to share intelligently their own concepts.

For the potential scientist provision should be made for more systematic general study of the sciences at the post-secondary level prior to entry into university courses or courses of other technical institutions of higher education. Reorganisation of science teaching along these lines would ensure that the scientists possess an understanding of the nature of their special contribution to human activity in a way that has not always been in evidence in the past, and at the same time would give the layman an understanding of science which should ensure his intelligent co-operation with the scientists to the general advantage of the community and offer some possibility of the politician and administrator understanding the implications of applying science concepts to special techniques.

There are a number of practical difficulties to the adoption of the approach outlined above. Some of them exist for whatever scheme of science

teaching is accepted, shortage of trained staff, inadequate laboratories, lack of equipment, unsatisfactory textbooks, little or no facilities for teacher-training. The approach in terms of direct experience and inter-relation of the various disciplines will certainly call for more and better staff than is now available, but the education workers in the colonial service have not been fearful of experiment. In so far as laboratories and equipment are concerned, the requirements for special subject study along conventional lines and even those for general science are likely to be more complex than are the requirements for the pursuit of unit studies. As there are practically no satisfactory text-books for the teaching of science in the tropical dependencies, the formulation of new material is not likely to suffer from the handicaps which the existence of a considerable body of text-book material would be likely to impose. In practice, it is unlikely that text-books as such would be required; on the other hand, there would probably be an ever growing demand for exact reference material and source-books, and it is not unlikely that much material which for lack of a market at present lapses into obscurity would find a place in the field of general reference which at the moment rarely exists. The present lack of facilities for teacher-training involves no special problems in so far as a new approach to science teaching is concerned. Once the purpose of science teaching is established, the organisation of satisfactory teacher-training facilities is an administrative task.

"Hari Dina"
A New Guinea News-Sheet

THE STORY OF A VENTURE
IN NEWSPAPER PRODUCTION BY A NATIVE PEOPLE

By the Department of Education
Territory of Papua and New Guinea

A MONTHLY publication of interest and value as a possible pattern for those concerned with providing literature for native peoples has been issued for the past year by a group of Motu inhabitants of the village of Hanuabada, near Port Moresby. Its interest derives from the fact that it is written, produced and circulated by this group without prior reference to Europeans other than in the course of collecting material for publication. Its value, as a pattern, lies in its satisfaction, to a more or less marked degree, of the following criteria.

Firstly, literacy is not an acquisition which is retained without further effort and, whether literate in English or a vernacular, or both, the individual person has to practise the skills of reading in order to retain and enhance them. Thus, a paper in either English or a vernacular provides practice in reading for a large number, and in writing and composition for a more select few. Again, the change-over from literacy in a vernacular to literacy in English, whilst not accomplished easily is facilitated by the skills of eye-movements gained through reading vernacular materials.

Secondly, and closely related to the above, is the fact that the publication of such a paper provides a valuable educational exercise for many. The number given opportunities to participate in the production is revealed by a study of the contributions listed.

Thirdly, although the vernacular newspaper is criticised on the grounds that it serves a limited group, it is a factor in promoting group loyalty and cohesion which may be transferred to still wider groupings outside the ethnic group as knowledge grows. The paper contains news of other peoples and, in addition, represents a prestige factor to other peoples. The demonstration of a pattern by such a prestige group may be more readily emulated by other groups.

Fourthly, the publication is a medium for the presentation of necessary information and liaison material. Matters dealing with administration, government, health, agriculture and social activities which originate from Government and other sources are reproduced by native writers in the vernacular, which makes for readier comprehension and greater significance.

History of the Paper

During the latter half of 1949, a number of young men and women in the village of Hanuabada met together and formed the Hanuabada Social Club. A committee was elected and presented as its charter a plan to increase the opportunities for young people to meet together, to pay attention to certain health and hygiene matters and to enlist the co-operation of all in the education of children and adolescents. The document, although rather naive and reminiscent in parts of Government

policy papers, has been nevertheless the basis of their work. They concluded it by saying, "Whether these plans be fulfilled or not, and we hope they will, we are directing our aims to the future of the rising generation."

The Social Club met regularly, but found some of its ambitions difficult to realise because of several factors, one of them being their inability to contact the majority of the village. Meetings were attended irregularly, but in any case meetings accounted for a relatively small section of the community. In addition, the need arose for an exchange of ideas with the rest of the Motu people who are spread up and down the coast for a distance of seventy miles. The idea of a newspaper was born—stimulated by this need and also no doubt by the type of news-sheet produced in one or two Districts by the Department of Education.

First Production

In April, 1950, permission was sought by the Social Club to produce a small news-sheet at fortnightly intervals. The committee met frequently to discuss the format of the paper and possible titles—finally presenting as their suggestion the name *Dohore*—a Motu word meaning "wait a while" and one which has been unfavourably associated with Papua as a whole. Department of Education officers who were approached for advice, would not comment as they thought the word might have a more subtle connotation than that popularly accorded it. The committee solved the problem by discarding this name in favour of *Hari Dina* ("To-day"). A heading was drawn for the paper, consisting of the words *Hari Dina* imposed on a map of the Territory supported by a stick across the shoulders of two stalwart Papuans. The whole is remarkably symbolic and remains unchanged in the present publication.

On Thursday, June 8th, *Hari Dina* made its first appearance as a duplicated foolscap sheet, printed on both sides but so folded that the paper consisted of four octavo pages. Paper and stencils had been provided as encouragement by the Department of Education, as was the use of a duplicating machine, but the publication committee of the Social Club was responsible for the production of the paper. The first issue was marred slightly by the incorrect cutting of the stencils, which resulted in the heading arriving on the back page. About 100 copies of this first issue were circulated at a charge of 3d. per copy.

Since this issue, the paper has appeared regularly at monthly intervals and was increased at the fourth issue, to eight octavo pages, and at the fifth issue, to eight quarto pages. Production has improved, and both typing and stencilling are of a reasonably high standard.

Contents

The first issue was devoted largely to self-advertisement but also included a novel item in the form of a letter from a baby to its parents asking them for their constant care and pointing out the advantages of hospitalisation in time of sickness. Another article drew attention to the differences between truth and untruth (without recourse to any philosophical distinctions). A strong moral flavour was evident. It reflected firstly the close association of the village with the London Missionary Society and, secondly, an almost pathetic attempt to avoid censure from any section of the community.

The moral flavour still remains, but the gradual growth of the paper's coverage reflects accurately the extension of the village's social life and the editorial staff's growing appreciation of the paper's functions. Its value was demonstrated during the Village Council elections and, more recently, with regard to the re-introduction of head tax. Reports on sports, club activities, general village news are well balanced by exhortations and wider territorial comments. To illustrate this growing coverage, the contents of the paper for

the issues of December, 1950, and April, 1951, are quoted below :

Monthly Coverage

December, 1950.—Editorial: Commonwealth Jubilee. Work of Welfare Section. Hanuabada library. Work of Dr. C. Belshaw (anthropologist). Poroporena Choir and Carol Concert. Junior Red Cross activities. Report on progress of new village. News of Girl Guide Commissioner. Final report on Christmas tree. Article on personal hygiene. Report of Test Cricket series. General news: Notice of Christmas holidays, L.M.S. District Committees, Village Council news and Christmas greetings from *Hari Dina* to the people of Hanuabada.

April, 1951.—Editorial: Native Village Council tax. Junior Red Cross officers in Australia. Article on good manners. Article on meat. Article on education with reference to new administration school for village. News of library. Article on 1st Papuan Scout Troop. History competition. News of feeding centre for tuberculosis patients. General news: Return of L.M.S. missionary, news of forthcoming Public Holidays, item on Motu publications by Mr. P. Chatterton, news of choir.

Production and Distribution

Production and distribution of *Hari Dina* is described by the Editor himself in this statement. It is given in full, the only alterations being those to the English of the original submission.

"*Hari Dina*" (*Today*) *by Rima Gavera* (*Editor*)

"The vernacular paper *Hari Dina* (Today) is published by the Hanuabada Social Club, edited by H. Rima Gavera, Assistant Secretary of the Social Club, and duplicated in the Department of Education.

"Before the paper is duplicated, the editor collects articles from the committee of the Social Club and others, making sure that they are suitable to be printed in *Hari Dina*. The main topics to be dealt with in the paper are cleanliness, health, right living, right thinking, good manners and reports on any happenings in the village.

"The committee of the Social Club comprises: Chairman, Willie Gavera; Secretary, Sinaka Goava; Treasurer, Mase Rei; and Toua Kapena, Committee member. When all articles have been collected they are taken by the editor to Toua for his approval. Accepted articles are then passed back to the editor who, with the help of Sinaka, types the stencils and draws the heading. When typed, the stencils are checked through by the editor and then taken to the Department of Education to be duplicated. With the help of Toua the paper is run off. It usually takes about two hours to complete duplicating.

"Now the paper has been printed, but the work of the editor is not finished. Before the papers can be distributed or sold (the papers are sold so that the Club may eventually buy their own paper and stencils), the editor checks all the pages for faults. All good copies are put aside and stapled together. The complete papers are now sent to members of the committee of the Social Club for selling. Copies are posted to those who have paid subscriptions in advance and free issues are made to certain people in the Department of Education. The distribution of *Hari Dina* extends to Daru, Western District, Papua. It is the intention of the club to ask Gestetner Pty. Ltd., Townsville, for a quotation for printed headings for the front page."

The Problem of Home Economics in Dominica

By DOROTHY JULES, *Assistant Teacher*

LIFE in Dominica can on the whole be very difficult for some people and a study of some of the conditions of family living would reveal the following basic needs, which constitute a serious problem in the teaching and practice of home economics in this island colony. They are :—

1. The need for more adequate incomes.
2. The need for more and better roads.
3. The need for wider education in good dieting and family relationship.
4. The need for better housing and facilities for home life.
5. The need for more accessible water supply.

In the light of this, it is clear that a great deal remains to be done if we are to raise to a satisfactory level the general standard of living, and the necessity becomes more and more urgent with the passing of each day.

1. *More Adequate Incomes*

The most basic need of Dominica is that some means be found to provide more adequate incomes for families, the majority of whom eke out an existence in the most precarious manner.

Strictly speaking, there are three income levels in the towns. There is a very low income group earning $60-$90.00 annually; a middle income group with less than $800 and a high income group earning $2,000 to over $3,000 annually. Away from the towns, rural families are less well-off where incomes are concerned, the majority of whom belong to the low income level.

Recently, there has been such a rapid rise in the cost of living that to provide a moderately decent standard of living a family income of $1,000–$2,000 would be required. But this is a dream that is not likely to materialise for a long time in Dominica.

By way of contrast, let us take for example Puerto Rico, where I had a short and intensive course in home economics during 1950. There we find various lines of action taken by Government and welfare workers in order to find a solution to the economic problem. Special steps were taken there (*a*) to provide employment and to improve wages; (*b*) to improve the economic status of agricultural workers by the Land Authority Act; individual farms, proportional benefit farms, homesteads, plots; (*c*) to set up and expand co-operatives; (*d*) to promote industrial development through the development of primary industries; (*e*) to encourage investors from overseas and continental firms to establish industries in the island; and (*f*) to increase the tourist trade.

It seems to me that some of these measures could be tried successfully in Dominica. For instance, something could be done directly by Government to improve wages and the economic status of agricultural workers by the methods used in Puerto Rico, and by the construction of proper roads by means of which farmers and planters could dispose of their produce.

" Co-operatives " have already been introduced but as they are still in their infancy, there have been as yet no marked results.

In the meantime other things might be done through the better teaching of home economics towards helping families to make better use of available resources and so cut down expenses and make it less difficult for families to live on their present incomes.

2. *More and better Roads*

Another fundamental need is the construction of proper roads so that rural families would be easily accessible to home economists and welfare workers. At present, due to the build of the Island with its backbone of mountains forming a natural barrier, separating east from west and *vice versa*, and further, owing to the absence of proper roads across those mountains for travelling, and proper transportation, the various villages are isolated and completely separated from each other and from the towns.

This condition makes it very difficult to contact families and discover their mode of life, and extremely difficult to launch the necessary programmes for solving their problems and improving their living conditions.

To solve this problem proper roads must be constructed and means of transport at a rate not above the earning capacities of the people should be placed on these roads. In this way, home economists and welfare workers would not find it so difficult to get in contact with the families of the various rural communities, and the families in their turn would have encouragement to travel and would, in this way, mix with other families and widen their experience and outlook.

3. *Education in Good Dieting and Family Relationship*

The health and welfare of a community depend on its diets. There is a marked deficiency of protein, calcium and some of the vitamins, in the diet of Dominicans. These deficiencies are due to bad food habits, lack of the right kind of food through poor distribution due to the absence of good roads for proper transportation, and ignorance of food values.

The bulk of the food eaten consists of carbohydrates and too many families take too little milk, meat and fish, vegetables and fruit.

Dominica is capable of producing sufficient milk for its families. The island is very fertile, and good pasture lands for the rearing of stock, *e.g.*, cows, goats, sheep, pigs can easily be developed. But owing to poverty and negligence this is not done, resulting in a scarcity of milk which would supply the calcium, riboflavin, protein and other properties so essential to health. In general, the people of the villages use more milk than the townsfolk. Many rural families own a cow and the milk supplied by the animal is used in the home or given to the neighbours; for on account of the absence of good roads, it is difficult to get the milk into the towns for sale. To mention the outstanding case, Roseau, the capital, gets the bulk of its milk from a village about ten miles away. The milk is brought in by women carriers who travel this distance every day over very hilly and undulating ground, and is sold at a price above the means of the low income families. As a result, the large majority of such families, including their several children, do not drink sufficient milk.

Not only milk, but also eggs, meat and fish which would supply good quality protein are scarce and much too expensive to be procured in sufficient quantities except by families in the highest income brackets. A comparison of current market prices gives an idea of the steep rise in the price of these commodities: eggs, from 1½d. to 3d. each; fish, from 3d. to 1s. per lb.; meat, from 6d. to 1s. 8d. per lb., and an upward trend is still noted.

Dominica grows large quantities of some of the best fruit and vegetables, but they are produced largely on a commercial basis for export and, consequently, much that should be available for local consumption is exported to

oversea markets, where better prices may be got.

Of course, there is unfortunately a fair amount of ignorance leading to bad dietary habits in the use of vegetables, and there are many people who believe that some fruits are harmful and that vegetables are good only when cooked or when taken in combination with other foodstuffs. Bad dietary habits are responsible a great deal for the many cases of malnutrition, which becomes a problem both of education and economics as well as of distribution owing to lack of proper roads. It is a problem calling for the co-ordination of all government and social services for its solution.

The nutritionist and the medical department could together plan programmes for education in nutrition. The agricultural department could devise schemes to stimulate the greater producing of food and the rearing of animals for milk and meat. The Government could construct roads so that the food and milk from the productive areas would find easy access to the non-producing areas. The home-economist could carry through projects to encourage home food production and teach cookery, the preparation of meals and various ways of using fruit and vegetables and so on. In this way the families would be in a position to better their nutrition by their own efforts with no increase in expenses.

On the whole, there is still much room, despite the present improvement, for raising the general standard of education in the colony. Much is being done but more and better schools are urgently needed and travel must be made much easier so that education may reach a larger number of people and it will become possible for families to gain easy access to our schools and other institutions.

There is a great demand for adult education, as a fairly large number of adults are illiterate. Most of the rural people do not speak English. They speak a patois which is a corruption of French and English.

There is also need for a daily press. The newspaper can be a valuable aid to education. It keeps people abreast of the times and informs them on current events and encourages them to read. Through the press the public can be given valuable hints in human and family relationships and better living and people can be taught to be less selfish and more helpful.

One way for improving home life is by teaching family relationships and getting people to make as much of their furniture as possible in order to reduce expenses. With the co-operation of Government, centres can be established where people could come and make their own items of furniture under the guidance and direction of competent persons. Domestic economy is to be taught at the new centre in the course of construction in Roseau, where families might learn to improvise necessary furniture and to beautify and improve cheap ones. For instance, cupboards and shelves can be made from wooden boxes, flower vases from empty cans and jars, picture-frames from bamboos or cardboard and flower pots and vases from bamboo. A wooden box well-cushioned and painted can be used as a sofa or settee. Instruction will be given on the application of paint, varnish and polish so that members of families can beautify, decorate and improve the appearance of their homes or furniture.

Furniture cloth is rather expensive but people can be taught to substitute ordinary cloth for it. For instance, cushion covers can be made from coloured linen cloths; and table-cloths, face towels and kitchen towels from flour bags. Scraps of cloth can be made into rugs and mats; and local straws can be woven or plaited and sewn into hats, bags, mats, slippers and baskets.

4. *Better Housing and better facilities for Home Life*

In recent years there were two great

fires in the town of Roseau and quite a number of the houses so destroyed are yet to be rebuilt. Consequently, there is a great scarcity of dwellings, thus causing overcrowding and discomfort. Many of the existing houses are also too small for the size of the family. They are mainly two-roomed buildings with one bedroom and one dining-living room. Not infrequently a two-roomed house accommodates two families, one in each room. Some houses have four rooms, one living room, two bedrooms and a dining room.

On the whole, the houses lack sufficient space for privacy and healthy living. Bedrooms are very poorly equipped and men and women are huddled together and children are put to sleep on the floor, on rags or on mattresses.

Both the inside and outside of the houses are unattractive and uninviting.

Kitchens, where they exist, are usually very small shacks carelessly built and poorly equipped. They are built away from the house, and cooking is done on coal-pots or "fire-places" consisting of three stones, so arranged that a pot could be placed on them. Firewood or sticks are placed between the stones.

In the towns, lavatories and bathrooms are luxuries enjoyed only by the highest income families. Middle income families use latrines fitted with buckets while the lower income families have no latrines but keep their excreta in utensils hidden in their backyards or under their houses to be emptied in the evenings or at dawn in the public lavatories. In the country the latrines are fitted with pits.

Too many families seem frustrated and appear to have no ambition, and rest satisfied with their state of life. The first step, therefore, is to devise a means of getting them ambitious and eager to improve their mode of living.

In Barbados, Puerto Rico and a few other islands there are Government housing schemes, the object of which is to house people of the lowest income groups. Low cost houses are constructed and rented at very cheap rates to the poorest families. The rent is determined by the family income, as only a very small percentage of it is taken. If this scheme could be adopted in Dominica, much would be done to solve the housing problem.

5. *More accessible Water Supply*

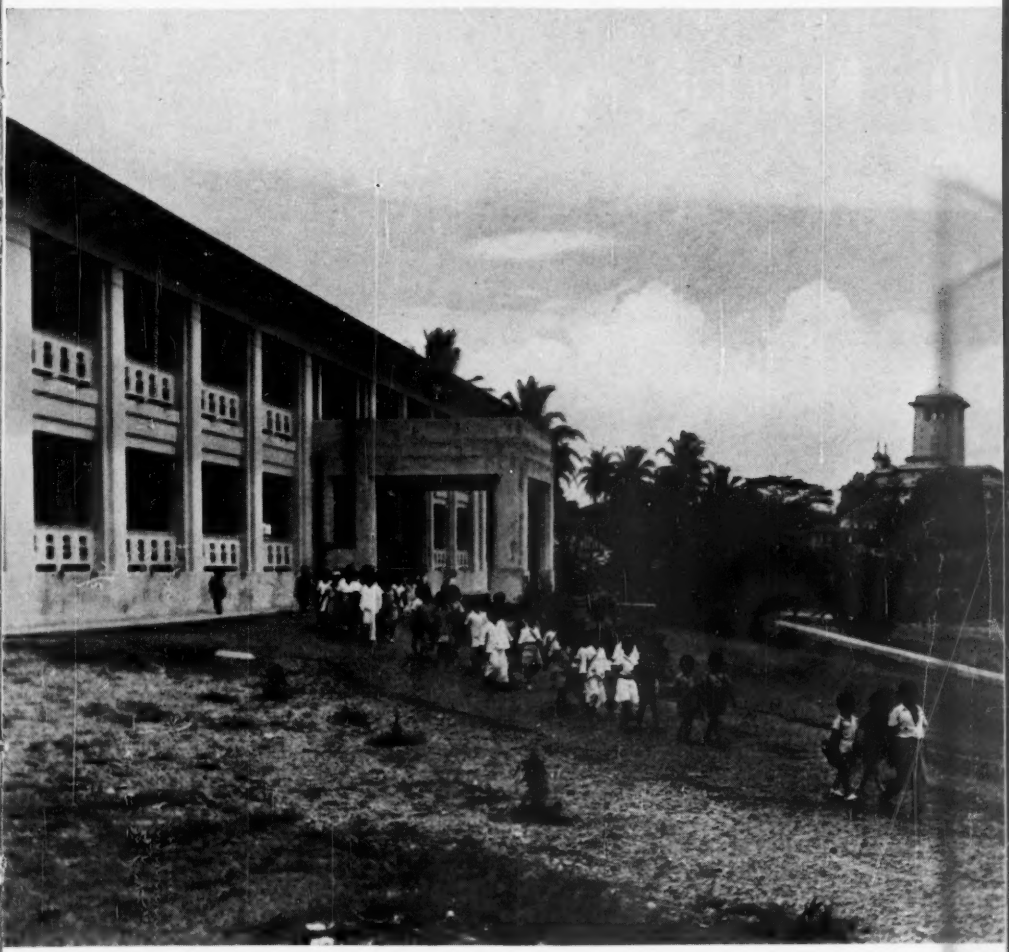
Dominica is very well watered, having 365 rivers. In the country water is obtained from rivers and springs and carried to the houses in receptacles, very often from considerable distances.

In the towns, water is obtained from public pipes, but a larger number is needed. Some families have water piped into their homes.

The responsibility of solving this problem lies on the Government, which should have more pipes available and supplied cheap enough for home installation so that more people might have them in their homes.

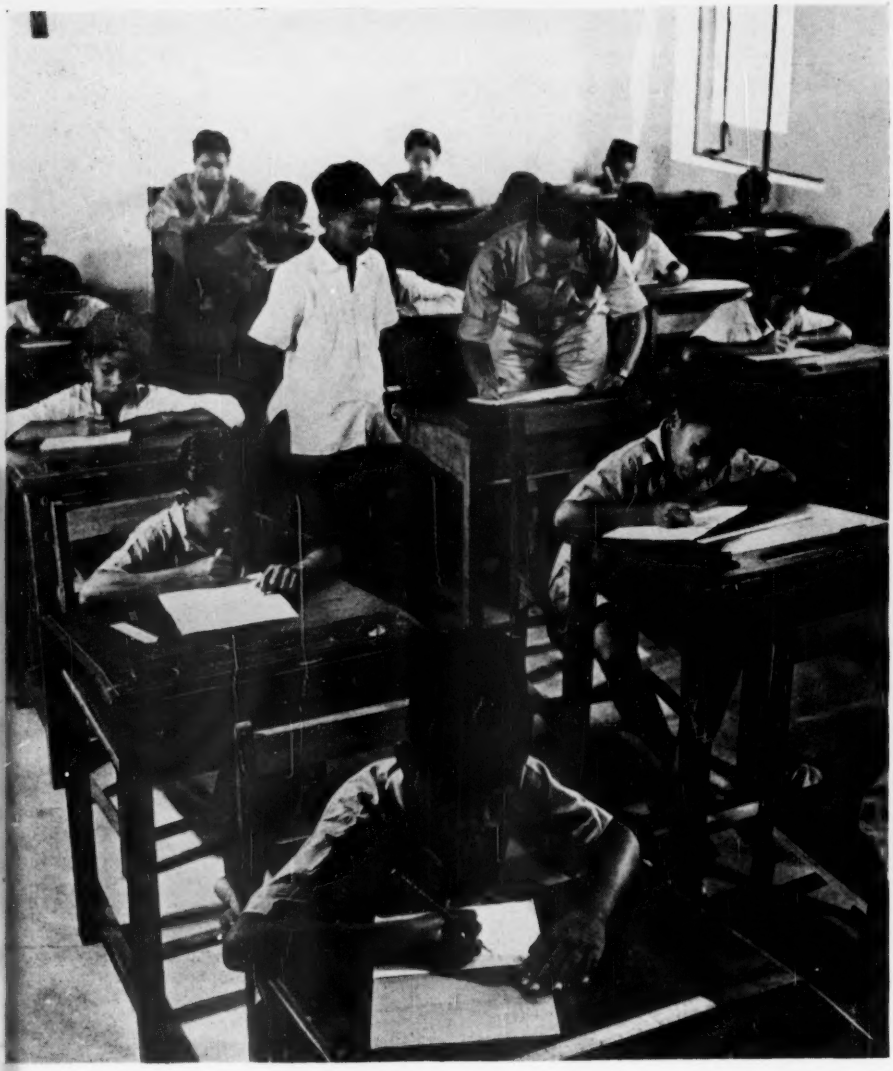
To sum up, formidable though the problem of home economics in Dominica might seem, in the present circumstances, yet a solution of the problem is not beyond our resources and already a start is evident in the new road-making programme, the hydro-electric scheme, school building expansion, the building of a domestic science centre in Roseau, evening 3-F classes in country districts, and the recent appointment of a West Indian expert as nutrition officer for the Windward Islands.

BOYS' PRIMARY SCHOOL AT JOHORE BAHRU, FEDERATION OF MALAYA

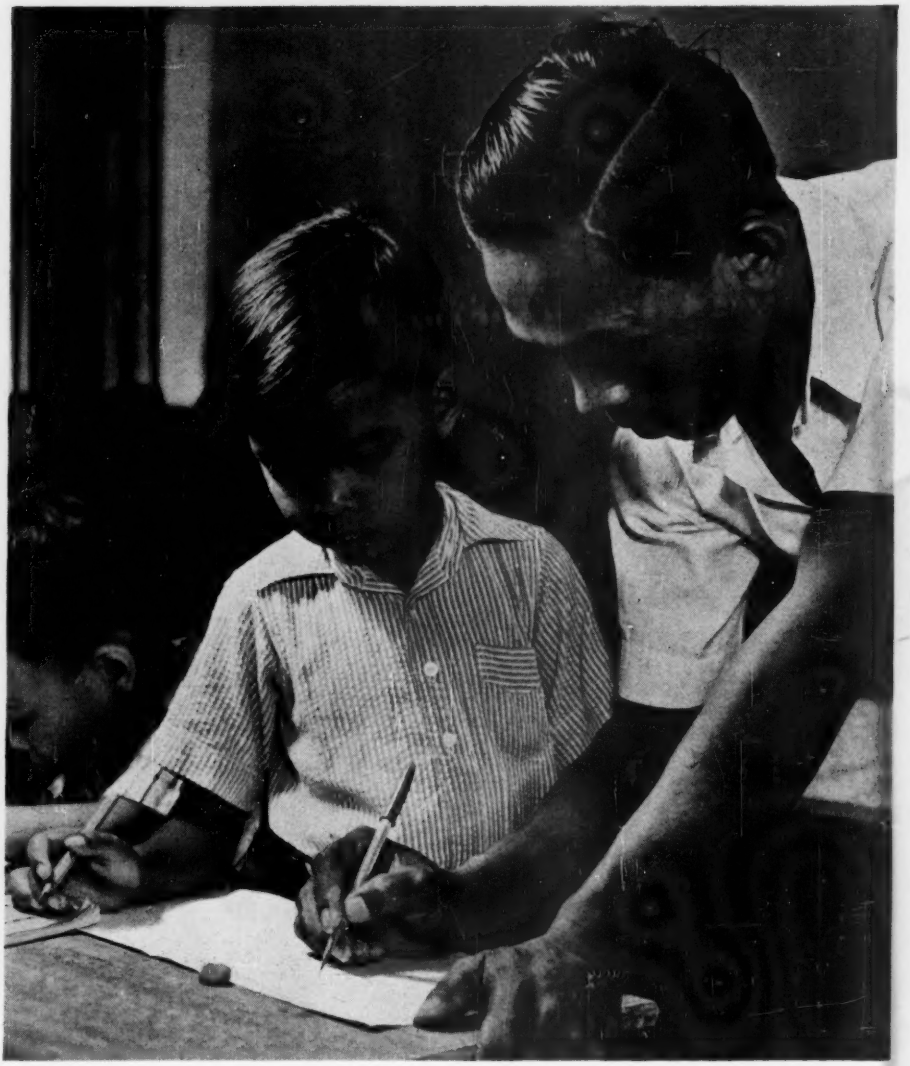


1. THE SCHOOL BUILDING

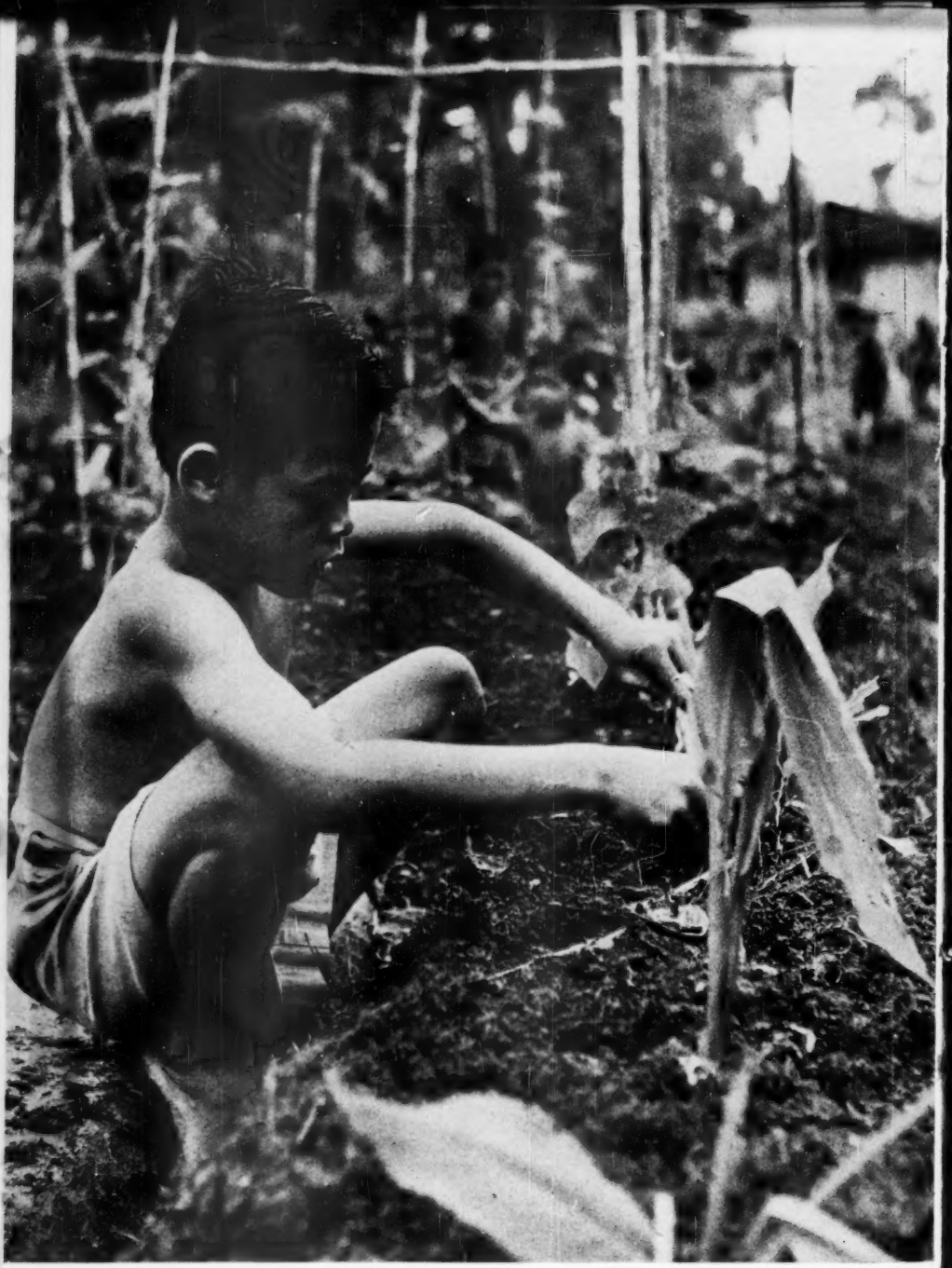
The tower in the background belongs to the Government offices



2. A CLASS ROOM



3. TEACHER AND PUPIL



4. IN THE SCHOOL GARDEN

The Singapore Council for Adult Education

By PROFESSOR F. MASON

Professor of Education in the University of Malaya

THE Singapore Council for Adult Education was formed on 20th December, 1950. By the end of July, 1951, 98 literacy classes with 3,000 students as well as many other activities in adult education were being conducted under its auspices. The story of its foundation and development is a notable example of co-operation between the Government, the University and voluntary bodies.

After the Japanese occupation a number of bodies like the East-West Society, which organised lectures and discussions, and the Peoples' Education Association, which provided literacy classes in English, tried to stimulate and supply a demand for adult education. Inevitably their work was limited because they lacked financial resources, good teachers were not always easy to find and the number of voluntary workers who had experience of, or were interested in, adult education were few. But these Associations did create in the public in Singapore an awareness of adult education, and tribute should be given to them for their pioneering efforts under difficult conditions.

On the 7th September, 1950, the Acting Director of Education, Singapore, invited to a public meeting those interested in adult education and at that meeting the following two resolutions were passed: (1) that there is a growing need for co-ordination of the efforts of the different agencies in the field of Adult Education to ensure the equitable distribution of Government financial support to all serious efforts; (2) that a Council of Adult Education should be set up in Singapore as soon as possible to co-ordinate all agencies who wish to join in without any loss of autonomy on the part of each agency.

A drafting committee prepared a constitution for such a Council and eight associations were invited and agreed to form the Council. One of these founding members was the University of Malaya, the other seven were the East-West Society, the Peoples' Education Association already mentioned, the Anglo-Malay Evening School (a body for the further education of Malays), a rural district committee, the Ramakrishna Mission (for the education of Indians), the Y.W.C.A., the Y.M.C.A. and the Chinese Y.M.C.A. January and February, 1951, were concerned with the working out of a budget and the framing of regulations for classes. Plans were made for 150 literacy classes, for ten classes in Adult Education, for the provision of each of these classes with a book-box containing at least 50 books and for visual aid equipment, a cine projector and film strip projectors with film strips. The Government accepted the proposals for financing this work, which included the appointment of a full-time organising secretary, and promised the Council a grant of approximately $170,000. Of this approximately 10% was for administration and 75% for literacy classes.

It was agreed to finance classes from 5th March and in the four months to the end of July 98 classes have already been organised. The responsibility for starting and running a class belongs to the voluntary association which is the

member of the council; the association is allowed to charge each pupil up to $1 a month to cover their running expenses and the class conforms to the regulations laid down by the Council, which approves the teacher and pays him. There is provision for associations, other than the founding members, to join the Council and organise classes (two further associations, a second rural district committee and a Chinese teachers' conference have already joined), but in order to prevent a mushroom growth of small associations who wish to join the Council, associations which wish to join serve a probationary period of six months, in which time the whole responsibility for the classes belongs to the Council. The one-dollar-a-month class fee per pupil which has been the usual fee and which the associations have been allowed to charge, provides them with a considerable income. The fee may be reduced or not charged at all for poor students.

It is highly probable that the target of 150 literacy classes will be reached before the end of the year, and that there will be 300 classes before the end of 1952. The choice of language belongs to the classes. Singapore is a Chinese city with a minority of Malays and Indians, and while there will be some classes in Malay and Tamil, the majority will be in Mandarin and English. At the moment there are 53 in Mandarin and 43 in English; this does not so much indicate the relative demand for Chinese and English as show the creditable efficiency of the associations which are interested in providing classes in Mandarin. When the other associations have settled down the number of English classes will probably exceed the Chinese ones.

One adult class of 14 lectures in problems of citizenship is already running and four classes, on logic, Malayan history, the cost of living, and economics will begin in the next two months. Three of these will use English as a medium and one Malay. Other experiments have been carried out and will be repeated. When Mr. Shearman visited Singapore the Council arranged that he should give two lectures, one to teachers and a second to workers. The first was given in three languages, Malay, English and Mandarin, and the second in five, Malay, English, Tamil, Hokkien and Cantonese. The procedure, which was very successful, was as follows. After a brief introduction, translated into all languages, the audience divided into small rows to hear the script either in English or in translation, and then all came back for a discussion in which questions, replies and comments, were with the aid of interpreters given or translated into all the languages.

The Council has also set its heart on having a central building, which will not only be a headquarters and "nerve centre" for all adult education in Singapore, but also have a small hall to seat about 350 people. It is hoped to have a first-class stage and the hall could be used for plays, films, lectures and exhibitions by voluntary bodies. In proposing such a central building the intention is not to centralise adult education, for we believe that for adult education to succeed it must be spread all over the colony, and we are already co-operating with rural district committees and community centres which have been formed for other purposes and by other bodies.

It is too early to take stock of the work in Singapore but certain things have already emerged which may be of interest to workers in other countries. The first is the rapid progress which can be made when Government, University and voluntary bodies co-operate together. The second is how great are the opportunities—the difficulty which the Council faces at the moment is how to meet the needs with which it is being continually presented. So far there has been no shortage of teachers to take classes but none of them have special training for the work, and they would benefit very much if someone could be set aside to train them. There is a great dearth of suitable materials in the

English language for use in classes and practically no material at all in Malay, Tamil and Mandarin. The University intends to give considerable help in these matters as soon as it has the staff available, and its education department intends to carry out a programme of research and experiment into the basic vocabulary in the different vernaculars. Using such vocabularies based upon word-counts, readers in the different vernaculars and in different subjects will be much more valuable and effective.

The pattern of adult education in Singapore is quite different from that in the United Kingdom but it conforms no less to the principle that one too readily forgets, *i.e.*, that the educational pattern reflects the social, political and economic patterns of the society. Thus the primary motives for students joining adult classes are economic. Whilst by a deliberate choice, which is embodied in its constitution, the Council does not provide vocational education, students flock to literacy classes in English because many think by learning English they will "get on in life"—peons that will become clerks, etc. For the same reason the interest is primarily in literacy classes rather than in classes in adult education, history, economics' etc. Although the motives are economic it does not mean that the rewards are economic ones—there is no evidence as yet that attendance at literacy classes leads to better employment. The social pattern is also reflected in the difficulty of building up strong voluntary bodies; the inhabitants of Singapore have been used to a paternal Government which they look to for benefits without pressing for them, and they do not readily join voluntary associations which work together for some aspect of the common good. The fact that interest in adult education arises out of self-centred and economic motives and not out of a social consciousness is not one to be denounced or derided but is rather to be accepted as a challenge. By the end of 1951 about 5,000 people, adults and adolescents, will be in adult classes, and in 1952 about twice that number. It is a great opportunity to interest them in citizenship in its widest sense and to get them to work together for the common good, and the Council intends to make good use of this opportunity.

Teacher Training at Roehampton

We are always faced with the problem of keeping education in oversea territories abreast of modern thought and practice, but adapting modern ideas to local conditions. In July and August, 1951, a conference was held at Roehampton, attended by a group of educationists from West Africa and Malaya engaged in the training of teachers, and by a group of His Majesty's Inspectors and other educationists engaged in similar work in Britain headed by Mr. L. C. Schiller, H.M.I. "The main purpose of the conference was to bring together a group engaged in the work of children at the primary stage in West Africa with a similar group in the United Kingdom, so that they might explore together current trends in educational thought, experience the development of practices and techniques, and finally (after the departure of the United Kingdom team), consider all this in relation to the possibilities and needs in West Africa." So says the preamble of the conference's report. There were some 45 educationists from West Africa, representing African men and European men and women (no African woman, unfortunately) from Government, voluntary agency and native authority service. There were two colleagues from Malaya.

We think that readers of *Oversea Education* will be interested in a fairly detailed account of the ideas discussed in this gathering at Roehampton, and we give copious extracts from the conference's report. We begin with the introductory addresses on *The Principles of Primary Education* in England and in West Africa, given by Mr. L. C. Schiller, H.M.I., and by Mr. S. H. Amissah of the Gold Coast.

Mr. Schiller said:

Ladies and gentlemen: During the next forty minutes I shall attempt to present to you some principles of primary education which I believe to be valid in England now. What I say will relate only to this country; not because its problems are more important: that is not true; nor because these problems have been or are being more successfully tackled: that is not true; nor because my own interests are limited to this country: that is certainly not true. The reason is simple: my knowledge of West Africa is not great enough to justify any reference to it.

I look forward to learning this evening how much of what is valid here may be valid for the process of change in West Africa.

Nothing stands still. In turn each generation succeeds its elders in different circumstances, and itself becomes different. In turn each generation, itself educated in the past, tries to educate in the present its children who will live in the future, which is not known.

Change is continuous; but it is not regular. Sometimes it is slow and we fail to perceive it; and sometimes it is quick and we call it a revolution. In this country a slow tempo is generally favoured; and educational institutions tend to move in the manner of the worm. The head stretches gropingly forward; a ripple runs down the forepart of the body; and the remainder rests undisturbed. Then the forepart begins slowly to follow the head; the ripple extends further and further towards the tail; and finally the whole body of the worm draws itself up to the rest. So in the schools of this country

there are always some stretching forward, others beginning to follow, and many resting undisturbed until in time the ripple reaches them also and they draw themselves up to the head. Indeed at any moment the schools of this country, as many other institutions, display a cross-section of history; some still reproduce with fair faithfulness the common practice of twenty-five years ago, and others boldly create what an optimist may hope will be common practice twenty-five years hence.

Nothing stands still; and I have opened my remarks by drawing your attention to the continuous change of a people and its schools, because it is this process of change which is the reality for which any principles of education must be valid.

Let us, therefore, examine some characteristics of this reality in this country. In the first place, the process of change must be observed in the schools, since change is determined by the schools and their teachers. No directive, no regulation decides which schools or which teachers shall form the head of the worm, or in what direction the stretched head shall move. The teachers in their schools command change. But there are, of course, many influences which affect the teachers: the climate of custom and thought in which we live—the change in my life-time in the education of girls reflects the change in custom and thought regarding women; public opinion expressed through press and radio, and sometimes through the pressure of parents; new ideas received from the creative thought and action of outstanding individuals; for some the inspiration of a faith; for all material conditions, and administrative routine.

Perhaps the greatest single influence is the almost instinctive habit of nearly all those engaged in education in this country which subjects every suggestion to the criticism "Will it work"? Many of the most successful teachers, and let it be added administrators and inspectors, know little about the principles of education and care less. They know what they want, and by a method of trial and error they move towards it: the principles which explain their action are enunciated later. There is much to be said for this amiable ignorance. Finding myself, when young, at work in an area where school conditions were abominable it seemed to me that nothing mattered but to improve these conditions. I now know, however, that some of the many mistakes made might have been avoided had we thought out more clearly what should be done when the conditions had been improved. With both feet well planted on the ground on which we work we need to glance from time to time towards the horizon where we, or others, will be working soon; and we need also to look back, since the present is where the future meets the past.

Let us, therefore, now look back and examine the process of change during the last twenty-five years. Just twenty-five years ago was published the Hadow Report on the education of the adolescent. The Report described adolescence as a stage of growth, and it stated the case for an education for adolescents conceived in terms of their stage of growth. We were then ripe for just such a statement; and in spite of the opposition of some influential bodies which I will not now embarrass by naming, the task of "reorganisation", of establishing separate schools for adolescents, was undertaken widely and with enthusiasm.

Five years later, in 1931, came the second Hadow Report, on the Primary School. It was a complete flop. This second admirable Report was the rational corollary of the first, and dealt with a problem of no less urgency or importance. But its impact on the schools was negligible: few people read it, and those who did failed to realise its significance. It came when we were not ready for such guidance; and only now, after twenty years, is its influence to be seen in action.

Historians will doubtless find, at some later date, exact reasons for this failure.

We, who merely live through our history, can but make a few groping guesses. One likely guess rests on the well-known fact that it is difficult to think of two things at once: most of the active pioneers in education at that time were occupied with the establishment of senior, or what we now call secondary modern schools, and they had little time for much else. But there were other causes which we may well guess to have been deeper and stronger than this: we were not then able to appreciate in this wider field the attitude towards children adopted by the writers of the Report; and generally we were not then willing to accept the social philosophy on which the Report is based.

If these guesses are right, to understand the process of change in primary education during the last twenty years we must consider the change in our attitude towards young children (and it is great), and also the change in our social philosophy (which is no less great), during this period.

The most powerful single force in this country affecting our attitude towards young children has been the English Infant School. The influence of its example has been present for over a century; but in recent times its influence upon our thought about primary education has been decisive. In order to view in perspective current thought we must see in the background the tradition and history of the Infant School. This traditional history I shall now attempt, at the expense of a digression, briefly to describe.

At the beginning of the last century most of the population of this country was illiterate. For most children there were no schools; though there was plenty of work for them in the factories and in the mines. At that time a certain cotton mill-owner, called Robert Owen, conceived the idea of establishing schools for the children of the workers in his factory in Lanarkshire; and he carried his idea into achievement. This was a remarkable idea in 1816, and the schools were a remarkable achievement; but they were especially remarkable for this fact: when he established his schools Robert Owen provided a special and separate school for the very young children. This was to be a place, he said, where they should play and sing and be happy: in other words where they should live their own lives as young children.

Robert Owen was a Welshman who worked in Scotland. But it was to the English that he gave an idea—an idea which struck their imagination and probably their humour; and all through the grim century which followed him, when education was required to give social discipline to the poor, the idea of a special and separate school where young children could play and sing and be happy was never quite forgotten.

And so, when national systems of compulsory education came to be established as the century wore on, in *this* country, unlike all others, school began at five years instead of at six or seven; and, wherever numbers allowed, the fives and sixes were given a special and separate school of their own instead of an introductory class in a school for older children. Thus came into being that unique institution, the English Infant School.

It was to be a place, he said, where young children should play and sing and be happy—where they could live and grow as young children. Robert Owen talked like this not because he was a sentimentalist (he was a capitalist mill-owner), but because he wanted to create a new and better world and he hoped to do so through education. His was not a popular idea with those who governed this country then. It soon became clear that the poor must be educated: the Reform Bill became an Act; and a literate population was necessary also for the factories. But "Social discipline is what we must have" the rulers said; and social discipline is what they had. One aim of the education of the poor (and sometimes it seems to have been a major aim) was preparation for that state of life in which it had pleased God

(they used then to say) to place them. Preparation: they must read, they must write, they must cipher a little, and learn to behave themselves.

What happened to the Infant School of Owen's dream? Strange to say it survived. The fives and sixes were taught to read, and to write, and to cipher a little; they were taught to sit still, keep silent, and behave themselves. But they still sang, and sometimes they played.

The result would not have pleased Robert Owen; but he was a visionary who always wanted a clear and distant view. The English climate is misty, and in that mist a compromise was reached whereby two conflicting ideas lived uneasily side by side; preparation for a prescribed place and fulfilment of a stage of growth.

When the century turned, and in our own times the education of the poor became the education of the people, still alive and warm in the English Infant School was the tradition born a hundred years before—a place where young children could fulfil their growth. And after the first world war in many infant schools this tradition burst into new life.

At this time the Hadow Reports were being prepared and the writers saw before them the practical example of many infant schools, whose purpose was to fulfil a stage of growth and whose teachers had their eyes turned not on subjects but on children, each child known as an individual person, growing and being helped to grow. And so it was that this conception of the school, and this attitude towards young children was adopted by the writers of the Primary School Report for the whole range of primary education.

There were, of course, other influences to this end besides the Infant School; and the ideas I have associated with Robert Owen have had also other sources: for instance Rousseau, Montessori and above all Froebel. The Kindergarten, which during the past eighty and more years has provided so well in this country for the children of those not poor, is not another solution of the problem before the Infant School: it is, or was, a solution of a different problem—the problem presented by children who have an assured future.

We witness today these two problems of the Infant School and of the Kindergarten in process of becoming one. This is an outward and visible sign of the change in social philosophy to which I have referred.

We have moved on in our thought from the education of the poor to the education of the people, and we have now come to think of the education of all our children. We have long accepted that very young children should fulfil their growth; and now we have come to place fulfilment of growth as the major task of all Primary schools.

It is for this process of change, proceeding in a generation of adults brought up with an earlier outlook, that our principles must be valid. Let us now consider some principles.

We have come to regard each and every young boy and girl not as an incomplete adult but as a complete child, an individual person in his or her own right; and we have come to regard each and every young boy and girl not as unprepared for life but as growing in liveliness. During each phase of growth the individual is complete, but is becoming different. Observation of children reveals not diminishing unpreparedness but increasing growth.

Let us look at this growing individual. How do young children grow? Growth proceeds from the beginning and is not easily seen in the backward perspective of later life. Let us, therefore, try to see it from the beginning onwards; and to limit our picture let us consider it only in relation to one single element—though an element which conditions all learning—the apprehension of time.

Time is one of those amazing phenomena which absorb the thought of great poets and lesser men; but it worries young children hardly at all.

Babies live in the minute; for them the future is as blank as the past. At two years old a child will forget his own mother in a couple of months, and the future stretches ahead hardly at all. Slowly the time span widens; and usually by adolescence memories give some sort of shape to the past, and the future begins to have some sort of meaning.

Of course it does not stop there. At twenty a year is still a long time, and eternity lies ahead. At fifty life seems but a short path disappearing round a near corner and a year slips by all too quickly.

Such in brief bald terms is an outline of the growth of young children's apprehension of time. Let us examine its significance. Not only do young children experience events in a perspective of time different from our own, theirs is a perspective so different that the experiences themselves have a different quality. For us occasionally there may come moments of intense awareness—usually moments of anxious waiting—when five minutes are as an hour. But such moments are rare and abnormal. To young children, however, five minutes are commonly as an hour to us. Their whole attention is focused, as it were, on a small span of time which they perceive with an intense vividness. The impressions and experience of young children are in consequence of a quality different from ours. What they learn from experiences, perhaps commonplace and trivial to us, can be judged only in their perspective of time.

This quality of apprehension conditions all their learning. Every new situation, every new material provides a field for exploration and fresh experience. To us who are mature, fresh experiences are rare: much even of what we call intellectual work is no more than routine, and we do the same sort of sum in the same sort of way with another set of figures. But to young children the world is full of fresh experience, full of fresh fields to explore. Their attention is focused with intensity on what is immediately before them, on what is happening now. That is how they learn: by experiencing and exploring what is before them, what is happening now. And often their lively imagination becomes active; then soon their whole being is integrated in one complete achievement, which we call—for want of a better word—creative work.

Experiencing, exploring, and creating, these are the important ways in which young children of seven and eight and nine and ten learn, and how through learning they grow.

That is a brief glance from one single point at the sort of person whose growth we seek to fulfil. Clearly the growth of such a person will not be fulfilled by being taught according to a prescribed scheme skills chosen merely to prepare them for the future. Skills which relate only to some *distant* use have little interest or meaning to young children. They do not apprehend such skills with their imagination but accept them merely as tricks. There results a performance, but no growth.

On the other hand a full life demands many skills of lasting value, more both in amount and degree than most young children at school now possess: skill to use the body, to run, to climb, to dance, as young children want to use their body: skill to use the eyes to see what young children want to see; skill to find out about what has been seen as young children want to find out; skill to say in movement, in painting, in speech, and in writing what young children want to say. Such skills for a present purpose, and to increase their present powers, aid the process of growth.

For young children the best preparation for the future is to live a full life now. Our way of living is conditioned by our environment, and the task of the teacher is to provide an environment in which young children can grow in liveliness. The most important part of this environment is the climate of thought and feeling created by the teacher as a person: it is the warmth and freshness of this climate that most aids

growth. But the environment must include material things, and ample opportunity for exploring, and experiencing, and creating. What sort of experience, what sort of exploration? The burden of the choice rests on the teacher. Children explore what lies before them; but they do not choose what lies before them. Circumstances, and available material, and stimulus are chosen if not by the teacher then by chance. The teacher must choose, taking chance as his ally. He will be guided by the children's interests, and the need to cultivate the children's own powers of choice. But there is a rich store from which to choose; what should be the criterion of choice?

I would suggest that the purpose of his choice, and indeed I would suggest that the purpose of primary education itself, is to enable each young boy and girl to grow roots into the civilisation in which they are born. It is in the nature of roots that through them nourishment for further growth can be drawn in continuously; roots do not show but strong roots give the power to stand firm alone.

We shall not make our choice well if we talk about "preparing foundations", and "providing basic requirements". Our thoughts are imprisoned within the words we use to express them, and we cannot solve a problem if we use the wrong language. We have need to use the language not of mechanics but of biology—roots, nourishment, growth—since we are concerned not with machines but with living, growing beings. We need to think of how children grow roots, and what is the civilisation into which they are born.

We shall not find out how roots grow by the statistical analysis of diagnostic tests, but rather by the intuitive observation of children's behaviour. We cannot guess how deeply roots have grown by assessing the difficulty of words read correctly from a card, but rather by observing how much children love books. We cannot measure the growth of roots by recording the quality of sums done correctly, but rather by noting how much that long process of discovery and invention, by which man has learned to count and to measure, has aroused interest and respect. A collection of dates and names of persons and places is worth no more than the facts it catalogues; our concern is with the growth of apprehension of time and space which alone gives sensitiveness to the now and then and here and there of a people making its civilisation.

Civilisation is not the relic of the past preserved in museums and picture galleries and libraries : it is the heritage of the past living and growing in the present. Nothing stands still. In turn each generation succeeds its elders in different circumstances, and itself becomes different. In turn each generation, itself educated in the past, tries to educate in the present its children who will live in the future, which is not known. Children strike their roots at birth; let us, therefore, help their roots to grow strong in the early years before adolescence, deep into the civilisation which will become their heritage. That is a principle I believe to be valid for the process of change in England now.

Mr. S. H. Amissah (Gold Coast) said:

Introduction

In dealing with this subject there is the obvious danger of generalisation and over-simplification arising out of the size of the area, the diversity of the people, their varying beliefs and customs, the variations in the length of contact with Western ideas and the restricted nature of my own experience. I have never been out of the Gold Coast except to study in England in 1944-46 and to attend this conference. Even so when schools are discussed anywhere there are at least three things which always have to be taken into consideration—the community, the child and the teacher. My comments will apply mainly to the Gold Coast but they will also be relevant to the other West African colonies represented at this

Conference and the differences will, I hope, be brought out in the discussion.

The Community

The ideas that underlie the educational system of any country spring from certain historical factors. In England the Infant School tradition grew up because Robert Owen thought that the children of his mill workers should be educated in schools where the children could play, sing and be happy. The Industrial Revolution had created a situation which had to be dealt with and the lead given by one person was followed up so that eventually a system grew up in which the Infant School child was established in his own right and educated according to his nature and needs.

In West Africa as elsewhere the development of primary education has been influenced by definite historical factors. For many years Africa was known as the " Dark Continent " ; the reasons were various. It was late to be opened up and brought into contact with the rest of the world. The early contact was largely through trade and along the coast of the Gold Coast, for example, there are castles and forts which are remains of those early days. Education in the early days was confined to the children born to the early traders, and it was not until the missionaries came that education was provided for the children of the country. It was education with a definite bias—to help the traders, to make the people literate so that they could read their Bibles, so that some of them could help the missionaries in their work. In the Gold Coast it was not until 1882 that the first Education Ordinance was passed. It is interesting that it had practically nothing to say about the nature of a child but something about the subjects of instruction — " English Reading, Writing, Arithmetic and, in the case of girls, Needlework. English, History and Geography may be taught at the option of the teacher." For many years grants were paid on the results achieved at examinations conducted by the Inspectors of Schools. Little wonder then that there grew up a long tradition of formal instruction in primary schools aiming at competence in the three Rs, and the prospects of clerkship at the end of the course.

The change in general attitude was reflected in the White Paper of the British Government in 1925 which laid down the principle of adaptation for education in British Colonial Territories in Tropical Africa. It recognised the fact that sound education does and should take into serious consideration the background of life and thought of the people and that in West Africa as well as in other parts of Africa where the impact of Western life and thought was having great repercussions, it was imperative that what was good in the traditional way of life should be preserved and enriched. It was possible to interpret the principle as an attempt to discourage people to aspire after the best in Western tradition, to keep them in a perpetual state of dependence and inferiority. That, I think, was a misinterpretation. If education was to help people to grow roots in a way of life, then the immediate life was that which made real sense for them. That life was far from static ; in West Africa it was absorbing more and more new ways, and if the new knowledge was to be something more than just a piece of information, in other words if it was to be a way of life, then it had to be closely related to the immediate environment in the first instance and gradually broadened.

A further vital change was in 1930 when the Council of the International Institute of African Languages and Cultures passed a resolution on the use of the vernacular in education, urging that the privilege of receiving education in and through the mother tongue should not be withheld from the African child and that he should learn to love and respect the mental heritage of his own people, the natural and necessary expression of which is the language.

This confirmed some people in their conviction, and though there were obvious difficulties where there were many vernaculars in a given area, the soundness of the principle educationally was irrefutable.

So gradually over the years some sound educational principles have gained ground and have been reflected in the day-to-day work of the schools, especially the Infant ones.

The Child

What about the Child ? Has he come into his own ? Is he really at the centre of education ? Is there adequate study of his nature as a guide to educational practice ? To answer some of these questions an attempt should be made to see something of the home background of some of the children. Naturally they come from a variety of homes—some are Christian, others polygamous, heathen ; some are good modern buildings with books, flowers, electric light, water laid on, regular meals ; others are very restricted in accommodation, very few amenities, and the child is ill-fed and not properly cared for ; some are in towns, a lot are in villages some distance away from the school, which means a daily walk of anything up to four miles to and from school. The parents naturally vary; some are educated and of the professional class, others are not so well educated or are illiterate ; some are farmers, fishermen, clerks, miners, petty traders, weavers ; some live with their child, others do not—a varied group as in my country but bound together by a common purpose, to educate their children even at great cost to themselves. There is in some parts of West Africa a more pressing demand for education than others, in the Gold Coast the demand is very great and that for various reasons. Education carries with it the prestige of the white man who has brought many important changes into Africa through the application of science and it is also the gateway to secure jobs with adequate remuneration and in some cases pension at the end.

This background exercises considerable influence on the general attitude towards schools. They are assessed largely on their examination results and regarded in a special sense as preparing the children for life. That preparation is not in the larger sense of a full development of children as persons in their own right and within the limits set by their environment. The position is aggravated by the fact that school education is the privilege of some boys and girls and not every child's right as in other countries, and that parents who have not themselves enjoyed the benefits of school education are prepared to make sacrifices in the hope that their children will eventually get jobs that are well-paid. If a country is being rapidly developed economically then it should be possible for most of the people who have been through school to be absorbed into various jobs. At the moment, however, the conception of well-paid jobs is mainly clerical and some people will rather go unemployed instead of taking on other lucrative jobs.

There is therefore some conflict between what is expected by most parents of their children and what teachers may consider as essential for their full development. I am sure that this position is not peculiar to the Gold Coast educational scene.

The Teacher

In view of the impact of Western ideas upon the traditional African way of life, the growing change in outlook, the sound and unsound conception of what education can or should achieve and all the other factors which constitute the mental atmosphere and setting for educational work, the training of the teacher is an important part of primary education. His training should take into consideration at least four things :

(1) It should help him to have a clear conception of what education should achieve for the child in the primary school. The teacher should have the conception of

children as growing persons with capacities which should be developed to the full within the limits set by environment and thus prepared to enjoy life more fully and to make their contribution to it in due course more competently.

(2) It should help him to know how best to deal with each of the subjects he has to handle, he himself learning through experience.

(3) It should provide him opportunity for cultivating himself, building up for himself a higher standard of life. This should mean more than mere factual knowledge and enjoying modern amenities. There should be opportunity to examine some of the basic conceptions of Western thought so that he can understand something of their impact upon African life and thought, for in West Africa the teacher has not only a responsibility to his children but also to the people among whom he works, to guide their thinking.

(4) It should help him to develop a right attitude to life. This is to me the bedrock of all the training. I think that basically the problem of primary education is the same anywhere because it deals with children who are growing up to become in due course adult members of their community. The conditions of life, the opportunities for full development and other underlying factors may (and they generally do) differ; but there are certain objectives which must be clear everywhere. Children must grow up to know that they live in God's world, that they are only part of His other children and that when they are old they justify their existence by bringing all that is best in them to the service of their fellows. If children will be helped to learn or begin to learn this larger lesson then the teachers themselves must have learned it.

We who are connected with education are right in ensuring that our children grow up well-fed, well-clothed, with keen minds and opportunities for full development. If we fail to help them to learn the larger lesson of right attitude to the world and to their fellow men, we fail miserably. Fortunately that lesson can be learnt in West Africa with its comparatively slenderer educational opportunities at present as well as in England or America with its larger and fuller opportunities.

The report of the conference begins with a summary of the general principles and on the problems of applying them in West Africa. The points made are then amplified in a series of regional reports, five in number, from East and West Nigeria, the Gold Coast, Sierra Leone, the Gambia and Northern Nigeria. There is no Malayan regional report. We print the East-and-West Nigeria and the Gold Coast reports in full.

CONFERENCE REPORT

General Principles and their application in West Africa

The principle of activity in primary education is not new. It has been accepted and to a greater or lesser degree practised for a long time. Recent experience, however, points to its wider use in all the main fields of study.

By activity we mean the antithesis of the purely passive acceptance by children of teachers' instruction. Activity ranges from practical work directed to a great extent by the teacher, to group or individual efforts, guided and inspired by the teacher in all fields of study.

Such activity gives children greater opportunities for developing initiative, imagination, powers of observation and co-operation with others on a basis of fundamental skills and techniques. These, it is believed, are more swiftly learnt and more thoroughly understood where they grow out of children's own

interests and experience, and are related to their activities that cannot be undertaken satisfactorily without them.

With these educational principles and provided that conditions are such that the principles can be carried out with reasonable hopes of success, we, the West African Group, find ourselves in general agreement. Many of us would go further, and are ready in our own territories, both to expand our existing practices and to develop new ones. We believe that through this approach, children will make more—and that of lasting value—out of their period of formal education.

We would, however, from the outset, lay special emphasis on the fact that it would be fatal to try to implement this without making sure that it is in the hands of convinced, qualified and experienced people. Otherwise, imperfect understanding may well make confusion worse confounded.

It implies, therefore, encouraging among teachers and students in training, an attitude of mind which welcomes new and unfamiliar experiences for themselves and for the children they teach.

We recognise, too, that the conditions and problems peculiar to each region make modifications of what we have seen, heard, and taken part in during this course, both desirable and necessary.

Factors such as affect the position in West Africa are :—

1. Quality of teachers and training college staff.
2. Length of primary course.
3. The language factor.
4. Lack of continuity in staffing.
5. Inadequacy of equipment and school accommodation.
6. General health and diet.
7. Public opinion.
8. Environmental background.
9. Shortage of adequate professional supervision in the field.
10. Costs.
11. Administration and regulation as they affect these educational developments.

REGIONAL REPORT

NIGERIA (Eastern and Western Provinces)

1. *Territorial comment on the application of the new approach*

We agree that the new approach in education, as expounded in Part I and exemplified throughout the course, does encourage initiative in children, and the wish to take an interest in their surroundings, to find out about things and to go on learning. We further agree that we do want to see these qualities and this spirit of enquiry among the children of Nigeria, for there seems to be no doubt that, once implanted, these qualities will be of positive value in whatever community the child will later find himself.

2. *Requirements of society and public opinion*

In so far as the new approach in education should lead the child to a better understanding of the society in which he lives, he should be better equipped to take a full and responsible part in it when the time comes for him to do so.

Although the general public is concerned that opportunities for education shall be given to its children, parents take little interest in methods of teaching in the schools, and are not likely to react unfavourably to the introduction or extension of activity methods.

3. *Length of basic course*

We are concerned that so many children leave school after four years without being able to complete the full primary course, and we look forward to the time when there will be sufficient trained teachers to staff Senior Primary classes for all children who complete the Junior school course. In a short school life of only four years children can only be inadequately introduced to the new methods, and may never achieve the attitude to life which they should engender.

4. *Teachers*

The most serious limitation to the application of this approach is the

shortage of trained teachers of good calibre, for these methods call for teachers of initiative and resourcefulness who have been specially trained in the new techniques, and who have an understanding of a good relationship between teacher and children.

As a means to this end we think that the profession should be made more attractive to students with secondary school education, and that as soon as circumstances allow Higher Elementary teachers with the aptitude and inclination for Junior School work should be allowed to do it, instead of being put in charge of Standards V and VI to fulfil staff quota regulations.

Meanwhile it seems to us that the place in which to inculcate activity methods is in the two-year elementary training college, even though it is recognised that the quality of some of these teachers may not be good enough for these new methods to be carried out without close guidance, and continued help from the college when the training course is over.

5. *Training college staff*

A serious limitation is the shortage of training college staff equipped and able to teach the new methods. This applies especially to physical education and art, in which we feel it would be unwise to develop along new lines without the expert guidance of well-qualified specialists.

In order to improve and maintain the quality of teachers when they have left their colleges, it will be necessary to free training college staff from time to time to do " follow-up " work in the schools. This would call for increased staffs in the training colleges, and for close co-operation between Visiting and Supervising teachers, and Training College staff in the field.

6. *Environmental background*

We agree that the Nigerian background is full and varied enough to provide a rich field for study, if the teachers know how to guide the children's enquiries—for without training and experience, teachers who have a limited knowledge and education themselves will not be able to use this method and field for study. There is need for a good deal of exploration into ways and means of obtaining information about the local environment and society. While verbal questioning will bring knowledge of the work of craftsmen, sequence of crops, local tradition and history, etc., many avenues of enquiry will of necessity be closed or narrowed without adequate reference books. Meanwhile training colleges can in some measure supply their own remedy by building up their own records for reference, based on students' contributions, and by arranging for the exchange or pooling of information between colleges and between college and ex-student teachers.

7. *Language*

(*a*) In Yoruba country the vernacular language does not present any limitations to the use of the new approach in oral and written work, though some exist where the conflicting claims of the Ibo dialects are felt, and where there are mixed languages as in Benin and Warri provinces.

(*b*) The teaching of a second language takes school time, and calls for formal treatment in the early stages. Until a certain skill and vocabulary have been acquired the amount of free expression that can be done in oral or written work is necessarily limited.

(*c*) Shortage or the complete absence of vernacular reading matter is a serious handicap, because the amount of reading children can do on their own is thereby limited, and they cannot use the only reference books available until they have acquired sufficient skill in the English language.

8. *Buildings, equipment and materials*

There is no end to the improvisation that can be done by a good teacher following the new methods. It must be recognised, however, that the teacher's

work is made more difficult by lack of separate classrooms, small classroom and storage space, difficulty of obtaining paper and apparatus, and other deficiencies of buildings and equipment that are common in Nigerian schools.

9. *Administration and regulation so far as these affect these educational developments*

As activity methods may call for some relaxation of the rigid framework of the timetable and printed syllabuses the Training Colleges cannot introduce these new ideas without the co-operation of the Education Department and of the schools themselves. Much help could be given in the improvement of educational methods if experienced and trusted headmasters could be given the freedom to modify and adapt existing syllabuses, after consultation and with the full backing of the officers of the Education Department and the Mission authorities.

10. *Continuity of posting*

To give every opportunity for these new methods to develop successfully we think it essential that headmasters of schools and principals of colleges working on these lines should be left in one institution long enough to see and assess the results of their training and experiments.

Suggestions and recommendations

1. That support be given to the Training College principals on this course who have expressed their willingness to explore the possibility of introducing the new methods and techniques as and where considered desirable and conditions are suitable.

2. That this course should be followed up by a further meeting in Nigeria of members of the group to discuss progress and difficulties met in introducing new methods. We recommend that the Chief Inspectors of the Eastern and Western Provinces should be asked to convene Regional Conferences for this purpose towards the end of the college year in 1952.

3. That some experienced and trusted headmasters should be given the freedom to modify and adapt existing syllabuses, and that Provincial Education Officers and Voluntary Agency Supervisors should allow such experiments to be made.

4. That further opportunities should be made for the exchange of views on principles and methods, and the nature and results of educational experiments. Ideally, this calls for the establishment of an Institute of Education in Nigeria, but without it much could be done through conferences of principals and tutors of training colleges and refresher courses for practising teachers. It would be of great benefit to Nigeria if the Ministry of Education in England could be invited to send representatives on occasions to such conferences and courses.

5. As little is known in Nigeria of the new trends in physical education, we recommend that visiting experts be invited to come to Nigeria for a period of at least 12 months to study conditions of physique, climate, nutrition, etc., to recommend lines to be followed in physical education, and to select students to receive the requisite training in England.

6. As few Training Colleges have the special staff to train teachers to take Art in Junior Schools, it is suggested that the Nigerian College of Art, Science and Technology should be asked to provide short courses to enable teachers in Junior Primary Schools to teach Art on modern lines.

7. Training Colleges attempting to introduce these new methods would be greatly helped by having direct contact with a training college in England doing similar work, if this could be arranged either privately or through the Colonial Office and the Ministry of Education.

8. To meet the lack of suitable reference books it is suggested that :—

(i) Consideration be given to increasing the grant towards Training College libraries to enable

postal lending library schemes to be introduced or extended.

(ii) Provincial Education Officers should receive an allocation of revenue for a library of teachers' reference books. Visiting teachers could perhaps assist in their distribution.

(iii) That some British publisher be approached concerning the publication of an educational quarterly, to include reference articles and illustrative material especially appropriate to West Africa.

(iv) The technique of "study boxes" demonstrated by the British Council could be used by training colleges, both for their students and for ex-student teachers.

REGIONAL REPORT

GOLD COAST

It was agreed that the new approach was in the right direction, and that the basic principles could be followed in education in the Gold Coast. It was pointed out that some Infant Schools were already attempting something like this, but the Junior Schools are very static and need to adopt newer methods.

But the methods are nothing without the right attitudes—for if education is anything, it is the developing of attitudes and teaching children to think. From our observations in schools here we could see that new methods used without conviction failed ; therefore we must aim at developing the right attitude in the teachers. The teacher, as it were, sets the stage, initiates processes, helps and advises ; this was evident in many of the schools visited, even at the nursery class stage ; but the activity methods of the new approach should be followed up and supplemented by teaching as and when the child needs it. The teacher must be continually alert to recognise the moment when definite teaching is needed by the child, or children. This leads us on to consideration of the quality of the teachers, and the difficulties of the present system of fixed timetables. In the Gold Coast timetables are fixed—there is no real freedom of choice for the teaching of subjects, topics, or length of time. When a timetable has been approved by the Education Department it must be adhered to as a surety that a certain distribution of subject time is being adhered to—if that is not being done, then what is? *e.g.*, the general attitude, with so many untrained teachers in charge of classes. With the new approach it is essential that teachers know exactly what they are doing, and record their results.

Language

In the Gold Coast many children will finish their schooling after the basic course of six years' primary education. This basic course is affected by the learning of English, the second language, and by the desire of the parents that at the end of the six years children should be literate in English. It was agreed that if the new approach be used during this basic course, it must be based on the creative imagination of the child, and on the environment that the child experiences *before* he comes to school, *i.e.*, it must be done in vernacular. The child should not be taken out of his own culture. He cannot freely express himself and be creative in a foreign language.

It was unanimously agreed that sound education of any kind requires the vernacular to be the medium of instruction for a basic course.

Environment

The attitude of the Gold Coast parent is authoritarian in the main—based on respect for elders, father, uncle, chief. This affects the way children are treated at home, in school, and in the community. This attitude has many good points, but has at least one grave weakness. It weakens the child's initiative, he is always looking up to someone in authority, he is not brought up to be self-reliant. This is seen even at student level where students still look for direction and for

knowledge. They are not used to being thrown back on themselves to discover and explore fields of knowledge. This new method of approach is the reverse of this attitude—the child is presented with opportunities to use his initiative and creative imagination, it is based on his growth, and could be usefully carried over into family and social life.

Thinking of the schools as a prepared environment, the preparation of that environment needs much attention to make it rich, that the child may build up good concepts, and not waste time. We have all the essentials, clay, grass, trees, stones, water, and must use these relevant experiences to lessen the danger of the child living in two worlds.

Help to teachers—supervision in the field

1. Wherever possible, certain selected young teachers, recommended by the training colleges, should be posted to key schools, which may be near colleges, where they could apply the new approach with the encouragement and help of head teachers, supervisors training college tutors and education officers. Such schools might be used to demonstrate to visiting teachers new methods in education.

2. In this connection there should be much closer liaison between the Education Department and the training colleges so that all can co-operate in this experiment.

3. Tutors, whenever possible, visit past students in the field, not for inspection purposes but to maintain a personal contact, and discover problems facing young teachers. It is realised that too little of this can be done at present owing to demands of college timetables, and an extra member of staff attached to each college would be invaluable for this follow-up from the point of view of teachers and tutors.

4. There could be interchange between supervisors, visiting teachers and training college staffs for short periods.

5. All colleges should keep close contact with outgoing students, especially during their first years, after the manner of the Emergency Training College scheme in the United Kingdom.

Materials and buildings

1. The Teachers' Journal is being revived. It will be produced termly or quarterly by the Institute of Education, Gold Coast, and will contain several sections, *e.g.*, material, methods, general information, a particular topic. It will contain pictures, diagrams and charts to be enlarged and used by the teachers.

2. The Vernacular Literature Bureau is producing material in the form of small story books which could be used in schools, though they are primarily intended for Adult Education.

3. The West African Bureau of Current Affairs produces booklets and charts on varied topics.

4. Wesley College sends its monthly News Letter to all old students, supervisors, Education Departments and colleges.

5. Gold Coast Bulletin, issued by Public Relations Office, available to all teachers.

6. Gold Coast Library Board sends book-boxes to schools, colleges and individual members.

7. In Accra, two Children's Branch Libraries opened during 1951.

8. Many classrooms are too small for the number of pupils—there is no space for activity or movement in the room and the children are cramped.

9. Fortunately a great many lessons can be conducted out of doors, if there are adequate shade trees, but this is a necessity to be borne in mind when new classrooms are being constructed—space, and shade trees nearby.

10. A reduction in size of classes cannot be envisaged at this stage, with the shortage of teachers, and the increasing desire for an extension of education for all.

Curricula

1. The curriculum is affected by the inclusion of English as the second

language and by the desire of the parents that the child should be literate in English by the end of the basic course. Hitherto vernacular has been the medium of instruction in the basic course, with spoken English introduced in the Infant classes, and formal reading lessons with a class reader beginning in Standard I. We are disturbed by the report that English might be made the medium of instruction as early as possible in the basic course. It was unanimously agreed that sound education of any kind requires that vernacular be the medium of instruction for a basic course. This does not prejudice the teaching of English as a second language, and becoming the medium of instruction *after* the basic course.

The very fact that we have a basic course of six years Primary education, which for some is the extent of their education, affects the contents of the curriculum, but much further study of children of Infant-Junior age in the Gold Coast is needed to help educators.

The rigidity of the school timetable should be altered. It is recognised that it is a valuable guide for untrained teachers and that all teachers should know clearly what they are planning to do, but there should be greater elasticity so that each individual may be educated according to his abilities at the time.

There is also the problem of promotion of children from class to class as a result of an attainment test, even in the Infant classes. This affects the method and emphasis of teaching.

Health

It is no good discussing the methods of educating children if the children are not physically fit enough to benefit from education. The biggest immediate problem is food, and whether we can get the right food. There is also the question of the distribution; food may be plentiful in one area and almost unobtainable in others. There is not sufficient general knowledge among parents of what constitutes an adequate balanced diet. We must not forget that, in a way, the desire to have children educated has contributed to the problem of food production. Many boys who would formerly have worked on the farms are now attending schools, so the source of cheap labour has diminished. Mothers work on the farms and in many cases give their children money to buy food, instead of giving them breakfast, or food for midday. This problem will be further aggravated if and when we introduce universal primary education and unless this vital problem of food and correct feeding is solved progress will be vitiated.

Detailed Recommendations

1. An adapted course should be organised by the Education Department in consultation with the two members of the staff of the Institute of Education, Gold Coast, dealing with two or three aspects only. The members of the course should be selected method tutors and selected head teachers of demonstration schools and other key persons. The number of students should not exceed thirty.

2. There should be unit or area courses at which the Gold Coast delegates who attended the course in the United Kingdom could attend as leaders and helpers to assist students to experience for themselves the new approach, and to see their experiences in the light of the principles of the new approach.

3. The Colony course planned by the Education Department for January, 1952, might take the new approach as its theme.

We cannot stress too emphatically that all these courses should aim at providing experience, and may only tackle one aspect at a time, but that talk and theoretical knowledge are not a substitute for experience.

4. There is an urgent need for the moulding of public opinion. This can be done by—

(*a*) Training Colleges introducing activity methods to their own

students, in their own practice schools, and in schools in their neighbourhood. In the schools it should be started very carefully, maybe afternoons only, *e.g.*, exploration of environment.

(*b*) Supervisors may select a school or schools and settle down for at least three weeks there to introduce, help and advise on the activity methods, again this may be afternoons.

(*c*) Wherever possible, certain selected teachers who have been to the London Institute of Education for the associateship course should teach or be head teachers in selected schools, where they could demonstrate the new approach. This should be without prejudice to the salary they would get if they had been posted in the usual way after return to the Gold Coast.

5. For recruitment to training college and supervisory staff, experience in teaching in Infant-Junior schools should be given equal weight with academic qualifications.

6. A core of experienced teachers, with successful experience in the new methods, is essential on the staffs of Education Departments and Training College staffs to implement the new methods of approach.

7. More use of non-graduate teachers with successful experience of the new methods could be made.

8. As soon as practicable, it would be of great value if the associateship course at the Institute of Education, Gold Coast, be lengthened to include practical work in Infant and Junior schools with a view to gaining experience in applying the new approach.

9. Units and Education Departments should inform the Institute of Education as to possible posting of students admitted to their courses that they may plan to give them the widest relevant experience.

10. Teachers should explore and study their environment, immediate and extended, that they may be able to inspire the children, stimulate their ideas and curiosity.

11. There should be some breaking down of the present system of promotion by attainment test initiated, and less emphasis laid on termly examinations. There should be no class examinations in the Infant classes. A good teacher knows the progress of his pupils.

12. An intensified campaign initiated by the Health and Social Welfare Departments should aim at educating parents about right feeding, a balanced diet, and preparation of food. Films such as *Amenu's Child* help, as does the good work of the Mass Education teams, but much more continuous propaganda is needed to awaken the conscience of the general public.

Public interest in the growing of more food and of the right kind should be encouraged and fostered by the Agricultural Department.

Methods of preventing and dealing with erosion should be tackled and demonstrated by the Agricultural Department.

A school meals service, organised and subsidised by local education authorities, should be started in certain areas, especially the most urban ones.

Thus may a healthy teacher, whose attitudes are progressive and based upon the principles of the new approach, help a healthy child to become an alert, active, self-reliant, creatively imaginative being, whose knowledge has been gained through his own individual experiences, and who is equipped with the basic skills and curiosity to carry him further along the path to full citizenship.

Notes

Notes from the Sudan

In December, 1951, rapid progress was being made towards the completion of the Khartoum Technical Institute. The department of arts and crafts was ready ; so were the workshops of the building department and the large fitting and machine shops of the engineering department. Work was going on with the boarding hostels, dining hall, and students' club. There were at that time 235 students, some being trained as technical assistants, others as teachers, and 90 taking commercial courses to become clerks and accountants. The Institute when complete will house a thousand students.

The course in the three technical intermediate schools has been lengthened from three years to four. One of the schools already has a Sudanese headmaster ; nine Sudanese are undergoing technical training in the United Kingdom so that the Sudan may become less dependent for technical staff on expatriates.

Other educational news from the Sudan is largely a matter of routine : of new schools opening, new literacy campaigns and evening classes starting ; of educational discussions among local authorities. Recent political events have caused a certain amount of unrest among students and schoolboys, a disease which Sudanese education is always liable to catch from across the north frontier. The Minister of Education however has always taken a firm line in this matter, and his firmness in the past has been rewarded in this critical moment. Only at Hantoub secondary school was there any serious disorder ; there, however, matters were so bad that not only had the school to be closed but a number of the staff resigned. At Wadi Seidna there was a strike (unconnected with politics), but it was settled when fourteen boys were expelled and others suspended for a short time. Schoolboy strikers receive very little public support.

Welfare at Lusaka

We read of more routine progress in the welfare work at Lusaka in Northern Rhodesia, the only town in Africa or elsewhere which keeps us informed in this way. Attendance at crèches is increasing, and the children are much cleaner and tidier than they were. Parents are coming more to the children's clubs on open nights ; a boys' boxing match roused the parents to great enthusiasm. Libraries are being much more used, particularly by girls.

In October, 1951, Northern Rhodesia held its first course for girls' club leaders. Ten students attended. Six of these were young girls (two from each of the three existing girls' clubs) and the remaining four were women welfare assistants.

University Enrolment

Since the war, five new universities or university colleges have been founded in British colonial territories, and the university of Hong Kong has been refounded after the Japanese occupation. Most of these establishments have so far only a nucleus of students, for their large new buildings are still far from ready. Some doubts were felt whether it would be possible to staff the new colleges after the war, when universities in the United Kingdom were all trying to recuperate and to expand their staff. The present position is as follows :—

	Staff	*Students*
Gold Coast ...	99	340
Ibadan	77	337
Makerere	64	241
West Indies ...	67	240
Malaya	105	900
Hong Kong ...	83	800

Reviews

Learn and Live: A way out of ignorance for 1,200,000,000 *people.* (Unesco, H.M.S.O.) pp. 32, no price named.

This is an account of Unesco's " special project " of a chain of regional fundamental education centres. A brief note on the special project was given on page 116 of our issue of April, 1951. Briefly, the purpose of the project is to train some 5,000 workers in fundamental education, who will then train their fellow countrymen. The proposed international centres will also experiment with visual aids and literacy methods appropriate to local conditions.

This account is well written, and provides welcome evidence that the planners of the scheme have their feet on the ground. In particular, they realise that methods and materials produced for one district cannot be expected to be equally suitable in another. The anonymous author illustrates his generalisations by plentiful references to what is already going on at the last centre to be opened, that of Patzcuaro in Mexico. Here he has a good story to tell, and tells it well.

The special project is not only Unesco's most spectacular effort, it is also one of Unesco's soundest. Lack of trained staff and lack of money are the two greatest obstacles. If this Unesco scheme is carried out, there will at any rate be more trained staff available. It is a pity that Unesco talks as if the other obstacle did not exist. Nevertheless, this booklet is well worth reading, even if it costs nothing.

The Year Book of Education, 1951, edited by Professor J. A. Lauwerys and Dr. N. Hans. (London, Evans) pp. xii, 674, £3 3s. 0d.

This year book is produced by the London University Institute of Education, with the assistance of a strong editorial advisory board. There is nothing specially topical about it, there is no review of the year's events in the educational world. It is simply a series of meditations on some educational theme. Why it should appear at an interval of twelve months is a mystery which astronomers have not yet solved.

This year, the central theme of the book is Education and Morals. The book is divided into five sections. The first contains a series of six studies on moral philosophy, from the viewpoint of anthropologists, sociologists and psychologists, of orthodox Marxism, and of secular humanism. The second section contains ten chapters dealing with ten religious traditions : on Confucianism, Buddhism, Hinduism, Islam, and Judaism, on Roman Catholicism and four other branches of the Christian tradition.

Having thus set out the features of the problem, the editors then survey how the problem is tackled in different countries. One section, with ten chapters, surveys the English-speaking world, a second deals with six countries of Western Europe, and the last section of the book, headed *Asia and Africa*, deals with India, Pakistan, Ceylon, Egypt, the Arab countries, Kenya, China and Japan.

One cannot expect all the 43 named authors to be equally good. Some of them seem to forget the central theme and to chatter happily about the general state of education in this or that country. But the book contains a number of contributions most valuable and illuminating, notably some of the religious studies in section two, and in section three, Dr. Yeaxlee's discussion of undenominational Christianity and Professor Pear's short chapter on the training of character. The book is one for happy browsing. It is a pity it is so expensive to buy and so heavy to hold.

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